

VITAL and HEALTH STATISTICS

DATA FROM THE NATIONAL VITAL STATISTICS SYSTEM

**NATIONAL
CENTER
For HEALTH
STATISTICS**

**Series 22
Number 10**

Health Insurance Coverage of Adults Who Died in 1964 or 1965 United States

**U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service
Health Services and Mental Health Administration**





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VITAL and HEALTH STATISTICS
DATA FROM THE NATIONAL VITAL STATISTICS SYSTEM

Health Insurance Coverage of Adults Who Died in 1964 or 1965

United States

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Statistics on hospital and surgical insurance coverage for persons who died during 1964 and 1965, by age, sex, color, geographic region, family income, living arrangements, family size, and marital status. Based on data collected in a mail survey with questionnaires sent to the informant for the death certificate.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Health Services and Mental Health Administration

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IN THIS REPORT statistics are presented on hospital and surgical insurance coverage of adults aged 25 and over who died during 1964 or 1965, the last 2 years before the introduction of Medicare.

These statistics are based on data collected in a mail survey by questionnaires sent to the person who provided the funeral director with the decedent's personal information for recording on the death certificate.

The decedents about whom information is presented in this report are classified by age, color, sex, marital status, geographic region, living arrangements, family size, and family income during the last full calendar year before death.

About 48 percent of the decedents were reported to have hospital insurance and 37 percent were reported to have surgical insurance. The levels of coverage were higher for white decedents and for decedents who were married at the time of their death than for other decedents. Decedents in the Northeast and North Central Regions had higher levels of coverage for both kinds of health insurance than decedents in the South and West. Of all the variables included in this report, the single most influential one was family income. Only 30 percent of the decedents who were members of families with incomes less than \$2,000 were reported to have hospital insurance while the hospital insurance coverage rate for decedents in families with incomes of \$7,000 and over was 73 percent.

SYMBOLS

Data not available-----	•
Category not applicable-----	...
Quantity zero-----	-
Quantity more than 0 but less than 0.05-----	0.0
Figure does not meet standards of reliability or precision-----	*

HEALTH INSURANCE COVERAGE OF ADULTS WHO DIED IN 1964 OR 1965

Elaine J. Timmer, *Division of Vital Statistics*

INTRODUCTION

The data presented in this report were obtained from the National Mortality Survey which was based on a probability sample drawn from the file of death certificates representing all deaths registered in the United States during 1964 and 1965.

This report is concerned with the amount and kinds of health insurance coverage the decedents had in the 12-month period before death. The purpose of this report is twofold. First, since the data presented here measure the health insurance coverage of decedents in 1964 and 1965, they can be used as a baseline measure of the extent of coverage during the 2-year period before the introduction of the Medicare program. Although all decedents included in this report would not have been eligible for Medicare, a substantial proportion of them were age 65 or over at the time of death and therefore, many would have been eligible if Medicare had been in effect at the time. Second, previously published data on health insurance coverage in the United States refer only to the noninstitutional, living population. The data in this report, however, present coverage for two segments of the population not usually covered in other estimates of health insurance coverage. The population from which the sample for the National Mortality Survey was drawn includes those individuals who were residents of institutions at the time of their death. Also, as will be shown later in the report, the coverage levels of persons near death were different from the levels

for persons who did not die during the reference period.

Protection against the costs of medical care is provided by many types of health insurance plans. Only formal plans with defined membership and benefits were considered insurance in this survey. The insuring organization could be either a nonprofit or a commercial group.

In this report, data are presented for only two types of health insurance. The first is hospital insurance which pays all or part of the hospital bill for the hospitalized person; the second is surgical insurance which pays all or part of the bill for a physician performing an operation either in a hospital or in his office.

In general, the patterns of coverage were similar for hospital and surgical insurance although the proportion of the population covered by hospital insurance was greater than that covered by surgical insurance. For this reason, and because hospital insurance is the more basic type of coverage, much of the discussion which follows is limited to hospital insurance.

Although the National Mortality Survey collects information for decedents of all ages, this report presents data only for those persons who died at age 25 or older. This age limitation was selected since the questions on health insurance for persons who died during childhood referred to the coverage of the parent rather than of the decedent. Children are usually covered as dependents under their parents' policies until they establish their own households or reach an age specified in the individual policy. Since the ages

at which children normally leave their parents' households vary, the data for this report is restricted to decedents 25 years and over.

Decedents under age 25 represented only 3.6 percent of the total number of decedents aged 1 year and over in 1964 and 1965; thus, omission of these decedents does not distort the overall picture of health insurance coverage among all decedents. Also, such variables as marital status and income have meaning only for adults.

The questions on health insurance coverage in this survey referred to the decedent's coverage during the 12-month period before his death. Since most of the decedents were aged 65 and over, and since it may have been difficult to obtain or to continue insurance at these older ages, it should be pointed out that the figures presented here may also reflect the levels of insurance coverage of times prior to 1964 and 1965. For example, those decedents aged 65-74 would probably have had to initiate their coverage from at least 1 to 10 years before their death, i.e., while they were under age 65. Therefore, the following statistics on hospital and surgical insurance for persons dying during 1964 and 1965 may be viewed, in part, as a measure of the patterns of coverage during the 1950's and earlier.

SELECTED FINDINGS

Of the annual average of 1,648,691 adults aged 25 years and over who died in the United States during 1964 and 1965, 48 percent were reported to have hospital insurance and 37 percent were reported to have surgical insurance.

The highest levels of coverage were reported for decedents under age 65, and the levels of coverage were lower in each succeeding age group after age 65. For decedents aged 65-74, the hospital insurance coverage rate was 51 percent; for decedents aged 75-84 the rate was 40 percent; and for decedents aged 85 or older, the rate was 27 percent.

Fifty percent of the white decedents had hospital insurance coverage while only 26 percent of the nonwhite decedents had such coverage.

There was wide variation in the proportion of decedents covered by hospital and surgical insurance when they were classified by family income. For decedents in families with incomes less than \$2,000, the coverage rates were 30 and

21 percent for hospital and surgical insurance, respectively; for decedents in families with incomes between \$2,000 and \$3,999 the rates were 50 and 38 percent; for decedents in families with incomes between \$4,000 and \$6,999, the rates were 65 and 51 percent; and for decedents in families with incomes of \$7,000 or more, the rates were 73 and 60 percent.

Persons who were married at the time of death were more frequently covered by health insurance than other decedents. The rate of hospital insurance coverage for married decedents was 59 percent; for widowed decedents the rate was 36 percent, while for single and divorced decedents the rates were 35 and 34 percent respectively.

The patterns in the coverage rates among the four regions varied for hospital and surgical insurance. Fifty-three percent of the decedents in the Northeast and 51 percent in the North Central Region had hospital insurance coverage, while for the South and West the reported coverage rate for hospital insurance was 42 percent. The rates for surgical insurance coverage were 41 percent in the Northeast, 40 percent in the North Central, 34 percent in the West, and 31 in the South.

SOURCES AND LIMITATIONS OF DATA

The 10,408 decedents who were included in the National Mortality Survey were selected from the death certificates filed by each State and registration area. The decedents are a 1 in 330 probability sample of persons aged 1 year and over who died in the United States during 1964 and 1965. The statistics presented in this report were obtained from the responses to a mail questionnaire sent to the death record informant, i.e., the person who provided the funeral director with the personal information about the deceased for recording on the death certificate. The informant, who was usually a close relative of the decedent, was asked to provide information on health insurance coverage and socioeconomic characteristics of the decedents, as well as to identify the hospitals or institutions which may have provided care to the decedent during the year before his death.

A description of the survey procedures for the National Mortality Survey as well as a description of the estimation procedures is in appendix I. Since the data in this report are estimates based on a sample, they are subject to sampling error. Tables of approximate sampling error and instructions for their use are also presented in appendix I.

In addition to sampling error, the quality of survey data can be affected by other sources of error. One of these is the amount of knowledge the respondent has. Since the information about the decedent was provided by another person, the informant may not have known the answers to specific questions concerning the decedent or may only have been able to estimate some answers. However, the reporting of hospital insurance coverage for decedents may be good since 73 percent of the decedents had had one or more hospital episodes during the 12 months before death, and would have had occasion to use their hospital insurance. In addition, as in any survey, it is possible that the respondent may have misunderstood some of the questions and therefore may have reported erroneous data.

Another possible source of error is that associated with nonresponse. Of the 10,408 decedents aged 1 year and over included in the survey, there was no response for 938 cases (9.0 percent of the total sample). For decedents aged 25 and over, the nonresponse rate was 8.7 percent. For these cases, information about the decedent was imputed utilizing a computer. A discussion of the imputation procedures, and of some measures relating to bias in the survey procedures for the National Mortality Survey are also discussed in appendix I.

Definitions of the terms used in this report are given in appendix II; facsimiles of the Standard Certificate of Death and the questionnaire are shown in appendix III.

NATURE OF THE POPULATION

An annual average of 1,648,691 adults aged 25 years and over died in the United States during 1964 and 1965. Two-thirds of these decedents were 65 years or older. Because of their advanced ages, the decedents differed from the

living population with respect to several characteristics discussed in this report. Table A compares the decedent population included in this report with the civilian, noninstitutional population of the United States for January 1, 1965. The decedent population consisted mainly of individuals from the older age groups. Of the adults aged 25 and over who died during 1964 and 1965, about 66 percent were 65 years or older at the time of their death. Of the noninstitutionalized, living persons aged 25 or older, only 17 percent were of comparable age.

Among the decedents, a higher proportion were either married or widowed than was observed in the living population. These differences are related to the differences in the age distributions of the two populations. Since the decedents were from an older population, it is expected that more of them would have been widowed or married. The proportions widowed were 35 percent for the decedents and 6 percent for the living population. About 52 percent of the decedents as compared with 46 percent of the living population were married.

Of all decedents considered in this report, 19 percent were residents of institutions at the time of their death. These decedents, as well as those persons who lived alone or with nonrelatives, are classified as one-person families. As defined, 35 percent of the decedents were members of one-person families. About 27 percent of the decedents lived with their spouses and no other relatives at the time of death and an additional 37 percent were living with other relatives.

There was a marked difference between the two populations when family income was considered. The median family income for the living population (\$6,109) was more than twice as high as the median income for the decedents (\$2,590). The low family income reported for the decedents may be due, in part, to their advanced age, illness, and the generally low incomes associated with retirement.

The decedent population also differed from the living population as to the amount of hospital experience. A substantially higher proportion of the decedents (73 percent) had at least one hospital or institutional episode in the year preceding death than was observed during a year for the living population (10 percent).

Table A. Percent distribution of decedent population and civilian, noninstitutional population, by selected characteristics: United States, 1964-65

Characteristic	Civilian, non-institutional population ¹	Decedent population
<u>Age</u>		
All ages, 25+ years--	100.0	100.0
25-64 years-----	82.8	33.7
65+ years-----	17.2	66.3
<u>Marital status</u>		
Total-----	² 100.0	100.0
Married-----	45.9	52.1
Widowed-----	5.5	34.5
Other-----	48.6	13.4
<u>Hospital episodes</u>		
Total-----	² 100.0	100.0
None-----	89.9	26.8
One or more-----	10.1	73.2
Median income-----	² \$6,109	\$2,590

¹ Unpublished data from the Health Interview Survey for fiscal year 1965.

² Based on persons of all ages.

The following analysis of the extent of health insurance coverage among persons dying during 1964 and 1965, then, becomes more meaningful because the population under consideration is at high risk of being hospitalized.

EXTENT OF COVERAGE

Age and Sex

Among all adults aged 25 and older who died during 1964 and 1965, the last 2 years before the introduction of Medicare, 48 percent had some type of insurance which paid all or part of their

hospital expense and 37 percent had insurance which paid all or part of their surgical expense. Although these figures are lower than the coverage rates from the Health Interview Survey¹ reported for the living population in 1962 and 1963 (table B), the differential between the proportion of those decedents covered by hospital insurance and those covered by surgical insurance is similar to that reported for the living population.

Of the annual average number of adult decedents, 56 percent were males and 44 percent were females. Although fewer females died during 1964 and 1965, in the older age groups there were more females than males. There was a significant difference between the median age at death for males and females. The median age of the male decedents 25 years and older was 69 years, while for females the median age was 74 years.

Table 1 shows that the levels of coverage for both hospital and surgical insurance were higher in each successive age group up to age 65. Above age 65, however, the levels of coverage were lower in each successive age group. Among decedents under age 65, the coverage rates for hospital insurance ranged from 53 percent for decedents aged 25-44 to 61 percent for decedents aged 55-64. Similar increases were observed in the surgical insurance rates for age groups under 65. The high levels of coverage in these age groups may reflect the fact that during these years individuals are more likely to be employed and have better access to health insurance through their place of employment.

The rates of hospital and surgical coverage for decedents aged 65 and over were significantly lower than the rates for the younger decedents. About 60 percent of the decedents under age 65 had hospital insurance and 49 percent had surgical insurance, while for decedents aged 65 and over, the rates were 42 and 30 percent for hospital and surgical insurance respectively. In the oldest age group (85 years and over) the rates for hospital and surgical insurance were about one-half as high as the rates for persons who died before age 65.

Several factors can contribute to this lack of coverage among the elderly. Perhaps the primary factor is the retirement status among those persons aged 65 and over. It is probable that many persons who had health insurance coverage before

retirement were unable to retain the coverage after retirement either because the policy was available only to employed persons or because the retired person could not afford the premiums. Also, because health insurance was less common 10 to 20 years ago, many of these people who were last employed at that time may not have been covered even during their employ-

ment years. After retirement, these individuals may not have been able to obtain health insurance, even if they had chosen to do so, because of their advanced age.

Secondly, income is low at the older ages and it has been shown in other reports^{1,2} that low income is associated with low rates of insurance coverage. Thirdly, persons aged 65 and over have

Table B. Percent of persons with hospital and surgical insurance coverage for decedents 25 years and over and civilian, noninstitutional population, by sex and age: United States

Sex and age	With hospital insurance		With surgical insurance	
	Civilian, noninstitutional population, 1962-63	Decedents, 1964-65	Civilian, noninstitutional population, 1962-63	Decedents, 1964-65
<u>Both sexes</u>				
Percent of persons				
All ages, 25 years and over---	70.3	47.8	65.2	36.6
25-44 years-----	76.3	53.0	71.8	46.9
45-54 years-----	77.5	59.5	72.2	50.7
55-64 years-----	73.2	61.2	66.7	49.4
65 years and over-----	54.0	42.0	45.7	30.2
65-74 years-----	60.8	51.4	52.3	38.9
75 years and over-----	41.1	35.9	33.1	24.5
<u>Male</u>				
All ages, 25 years and over---	70.8	50.1	65.8	39.6
25-44 years-----	77.2	50.5	72.7	44.2
45-54 years-----	77.7	58.1	72.7	50.1
55-64 years-----	74.3	60.9	68.3	49.6
65 years and over-----	54.6	45.1	47.2	34.0
65-74 years-----	60.7	52.9	53.5	41.4
75 years and over-----	42.2	38.7	34.5	27.9
<u>Female</u>				
All ages, 25 years and over---	69.8	44.7	64.6	32.8
25-44 years-----	75.4	57.1	71.1	51.4
45-54 years-----	77.3	62.1	71.7	51.7
55-64 years-----	72.2	61.6	65.1	49.0
65 years and over-----	53.5	38.6	44.5	26.1
65-74 years-----	60.9	49.0	51.4	35.1
75 years and over-----	40.2	33.3	32.0	21.5

Table C. Effect of age adjustment on the rates of hospital and surgical insurance coverage, by sex: United States, 1964-65

Sex	Hospital insurance		Surgical insurance	
	Unad-justed	Ad-justed	Unad-justed	Ad-justed
	Percent			
Male-----	50.1	48.7	39.6	38.2
Female---	44.7	46.9	32.8	34.9

a high prevalence of chronic illness³ which may cause extensive hospitalization. These elderly persons who were known risks may have found it difficult to obtain health insurance or riders in the policy may have precluded payment.

Males had higher rates of coverage for both hospital and surgical insurance than did females. Part of this difference is due to the age distribution of male and female decedents. About 72 percent of the female decedents as compared with only about 62 percent of the male decedents were aged 65 or older. Older age is associated with low insurance coverage. In the age groups under 65 years, the rates for males and females were comparable except in the youngest age group; for decedents aged 25-44 the coverage for hospital insurance was higher for females than for males. However, for decedents aged 65 and over, the hospital insurance rate for males was significantly higher than the rate for females. The rates of coverage for hospital and surgical insurance were 45 and 34 percent respectively for males aged 65 and over, but only 39 and 26 percent for females of comparable age.

Table C shows the effect of age adjustment on the rates of insurance coverage for each sex. The rates of hospital and surgical insurance coverage were adjusted to the standard population of decedents aged 25 and older. After adjustment the rates for males remain higher than the rates for females. However, the differences between the levels of coverage for males and females decreased.

Color and Age

The extent of hospital and surgical insurance coverage differed greatly between the white and nonwhite decedents (table 2). About one-half of the white decedents as compared with only about one-fourth of the nonwhite decedents had insurance which helped pay for hospital expenses. For surgical insurance, the coverage rates were 39 and 19 percent for the white and nonwhite decedents respectively.

The lower coverage for nonwhite decedents is not a result of their age distribution. Table D shows that the nonwhite decedents were younger than the white decedents. Only 47 percent of the nonwhite decedents as compared with 69 percent of the white decedents were 65 years or older at the time of death. There was also a significant difference between the median age at death for the two groups. The median age at death for white decedents was 72 years while the median age for nonwhite decedents was 56 years.

Table E shows the proportions of decedents with hospital and surgical insurance that would be expected if the white and nonwhite decedents had the same age distributions. The age-adjusted rates for the nonwhite decedents were even lower than the reported rates. Even though the nonwhite decedents represented a younger population, their levels of coverage were below those for the white

Table D. Percent distribution of decedents 25 years and over, by age according to color: United States, 1964-65

Age	Total	White	Non-white
	Percent distribution		
All ages, 25+--	100.0	100.0	100.0
25-44 years-----	6.6	5.6	14.5
45-54 years-----	9.8	9.1	15.5
55-64 years-----	17.3	16.6	22.7
65+ years-----	66.3	68.7	47.2
65-74 years-----	26.2	26.3	25.3
75-84 years-----	27.3	28.7	15.7
85+ years-----	12.8	13.6	6.3

Table E. Effect of age adjustment on the rates of hospital and surgical insurance coverage, by color: United States, 1964-65

Color	Hospital insurance		Surgical insurance	
	Unad-justed	Ad-justed	Unad-justed	Ad-justed
	Percent			
White----	50.4	51.0	38.8	39.5
Nonwhite-	26.4	24.2	19.0	16.8

decedents. Other factors, then, besides age must be responsible for the significantly lower coverage rates for nonwhite decedents.

One of these factors may be the employment status of the nonwhite decedents. In 1964, the proportion of the civilian, noninstitutional population who were members of the labor force were 56 and 60 percent for white and nonwhite persons respectively.⁴ However, among those in the labor force, the rate of unemployment for nonwhite persons was twice as high as the rate for white persons. About 10 percent of the nonwhite labor force was unemployed but for white persons the unemployment rate was only 5 percent.

Not only was the employment rate lower for the nonwhite population, but the proportion of nonwhite persons employed in occupations which usually do not offer group health insurance coverage to employees was also higher for nonwhite than for white workers. Table F shows the percent distribution of employed persons by occupation group and color. About 22 percent of the nonwhite workers as compared with only 8 percent of the white workers were employed on farms or in private households. It is unlikely that persons in these occupations would have health insurance available through their place of employment.

Geographic Region

Comparisons of health insurance coverage among the four regions (table 3) show the highest rates for the Northeast and the North Central

Regions. About 53 percent of the decedents in the Northeast and 51 percent in the North Central Regions were covered by hospital insurance. In the South and the West, the coverage rates for hospital insurance were 42 percent.

The low coverage in the South is due partly to the high concentration of nonwhite decedents in this region. Of the 181,265 nonwhite persons who died during 1964 and 1965, 57 percent were in the South. The low rates of coverage in the South, then, reflect to some degree the low coverage reported for nonwhite decedents. The low levels of coverage for health insurance were evident throughout the entire South; coverage for both hospital and surgical insurance was low in all three divisions included in this region.

The low rates of health insurance coverage in the West have been noted in earlier statistics on health insurance.^{1,5} It would appear from table 3 that the low level of coverage reported for decedents in the West was centered in the Pacific States—Alaska, California, Hawaii, Oregon, and Washington—rather than throughout the entire region. In the Pacific Division only 39 percent of the decedents had hospital insurance while in the Mountain Division, the level of hospital insurance coverage (52 percent) closely resembled the level of coverage reported for decedents in the Northeast and the North Central Regions.

Table F. Percent distribution of employed persons, by occupation group according to color: United States, 1964

Occupation group	White	Non-white
	Percent distribution	
All occupations-----	100.0	100.0
Farmers and farm managers--	3.5	1.9
Farm laborers-----	2.6	6.8
Private household workers--	2.1	13.5
Other-----	91.8	77.8

Source: U.S. Department of Labor, Special Labor Force Report, No. 52, Apr. 1965, Table C-7, p. A-22.

This low coverage in the West does not appear to be associated with the age distribution of the decedents in this region. Figure 1, based on table 4, shows that only about 64 percent of the decedents in the West were aged 65 and older as compared with 69 percent in the Northeast, the region which had the highest rates of coverage for hospital insurance.

Since the West had fewer old decedents as a proportion of all decedents in the region, the rates should be higher than reported if age were the determining factor in the amount of health insurance coverage among decedents. Other factors, then, must influence the health insurance coverage rates in the West.

One possible factor affecting the rates of coverage for health insurance in the West might be the types of plans that are available. Although data on types of plans were not collected in this survey, some indication as to the distribution of the various plans by region and age are available from the Health Interview Survey.² The figures in table G refer to hospital insurance coverage for the civilian, noninstitutional population of the United States in 1962 and 1963. The data show that the proportion in the West covered by non-Blue plans was about twice as high as in the Northeast; for persons aged 65 and over, the differential was higher still. Similar figures released by the Blue Cross Association⁶ showed that the West comprised only 7 percent of the total Blue Plan membership in 1965 although it had about 17 percent of the total U.S. population.

It would appear from these data that private insurance companies provide relatively more coverage in the West than in the East. One study in California⁷ reported that "the mechanism of voluntary health insurance with the largest enrollment in California is private insurance." Many of the insuring agencies described in this study were medical society groups affiliated with private industries. Although the rules governing membership in these various plans differed, many of the plans indicated that they insured only employed persons and their families. Since the population for the National Mortality Survey is primarily comprised of elderly persons who were probably not employed, the problems of cancellation and conversion of policies at retirement may take on great importance in the West

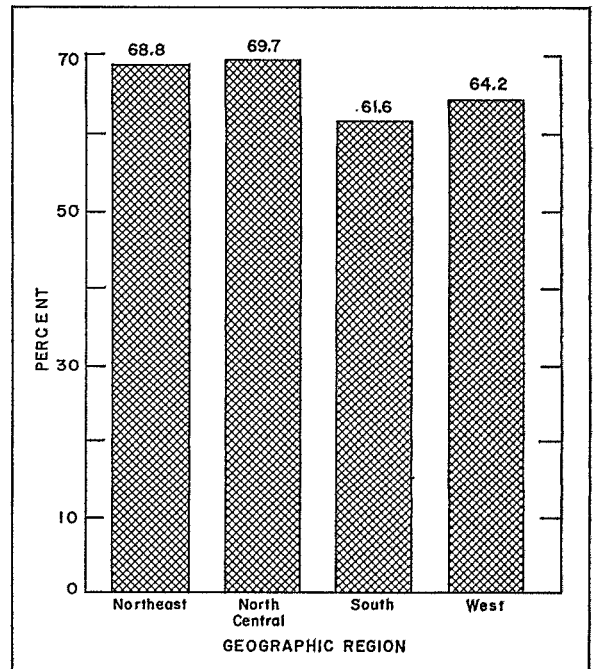


Figure 1. Percent of decedents 65 years and over, by geographic region.

and thus contribute more to the low coverage rates observed there.

Another reason for the lower coverage in the West might be the high prevalence of military services personnel and their dependents in this region. Because uniformed services' dependents are covered by the Dependent Medical Care Program, they are not likely to have any other health insurance. However, the impact of the Dependent Medical Care Program on the reported health insurance coverage rates for decedents may not be great since most of the decedents were old and it is unlikely that they would be eligible for such care.

Family Income, Living Arrangements, and Family Size

The income referred to in this report is the total money income received during the last calendar year by all persons in the decedent's family who lived in the same household. Decedents who lived alone or who were residents of institutions at the time of death are classified as one-person families.

The adults who died during 1964 and 1965 had low family incomes. About 44 percent had incomes under \$2,000, 22 percent had incomes between \$2,000 and \$3,999, 18 percent had incomes between \$4,000 and \$6,999, and 16 percent had incomes of \$7,000 or more. For each demographic characteristic shown in table H, the largest proportion of the decedents were those who were members of families with incomes less than \$2,000.

The level of health insurance coverage has been shown in earlier reports from the Health

Interview Survey to be related to the level of income of the population.^{1,2} When family income is low, an individual might not consider health insurance to be important.

For adults dying in 1964 or 1965, the levels of health insurance coverage were higher in each successive income level (table 5). Only 30 percent of the decedents in families with incomes less than \$2,000 had hospital insurance. For decedents in families with incomes between \$2,000 and \$3,999 the rate was 50 percent; for decedents in families with incomes between

Table G. Number and percent distribution of persons with hospital insurance coverage, by type of plan according to geographic region and age: United States, 1962-63

Region and age	All persons		Persons with hospital insurance				
	Number	Percent with hospital insurance	Number	Total	Type of plan		
					Blue Plan, with or without other	Other	Un-known
<u>All regions</u>		Percent distribution					
All ages-----	183,147	70.3	128,703	100.0	45.2	47.5	7.3
65 years and over-----	16,867	54.0	9,107	100.0	50.0	45.8	4.2
<u>Northeast</u>							
All ages-----	45,716	78.0	35,649	100.0	64.1	31.2	4.7
65 years and over-----	4,373	59.6	2,606	100.0	71.5	26.1	2.4
<u>North Central</u>							
All ages-----	52,703	76.4	40,255	100.0	43.7	49.0	7.2
65 years and over-----	5,230	58.7	3,071	100.0	49.2	46.3	4.5
<u>South</u>							
All ages-----	55,685	60.2	33,544	100.0	35.2	54.6	10.3
65 years and over-----	4,810	47.1	2,264	100.0	36.1	58.0	5.9
<u>West</u>							
All ages-----	29,043	66.3	19,256	100.0	31.1	61.9	6.9
65 years and over-----	2,454	47.5	1,165	100.0	26.8	64.7	4.4

Source: PHS Publication No. 1000, Series 10, No. 16, tables 15 and 16.

Table H. Percent distribution of decedents 25 years and over, by family income according to selected characteristics: United States, 1964-65

Characteristic	Family income				
	All incomes	Under \$2,000	\$2,000-\$3,999	\$4,000-\$6,999	\$7,000 and over
All decedents, 25 years and over--	100.0	43.5	22.0	18.2	16.2
<u>Age</u>					
25-64 years-----	100.0	27.9	20.5	26.7	24.9
65 years and over-----	100.0	51.4	22.8	13.9	11.8
<u>Sex</u>					
Male-----	100.0	39.3	24.2	19.5	16.9
Female-----	100.0	48.9	19.2	16.6	15.3
<u>Color</u>					
White-----	100.0	41.5	21.9	18.9	17.8
Nonwhite-----	100.0	60.0	23.0	13.0	4.0
<u>Region</u>					
Northeast-----	100.0	40.0	21.8	19.4	18.8
North Central-----	100.0	43.0	21.3	19.3	16.4
South-----	100.0	48.0	22.9	16.6	12.4
West-----	100.0	42.3	22.0	17.1	18.6

\$4,000 and \$6,999 the rate was 65 percent; and for decedents in families with incomes of \$7,000 or more the rate was 73 percent. Coverage for surgical insurance was similar.

Table J shows the percentage of the decedents having hospital insurance within each income category and the distribution of the population by income. Decedents in families with incomes less than \$2,000 represented over 40 percent of all adults dying during 1964 and 1965, yet only 30 percent of these decedents had hospital insurance. Decedents in families with incomes of \$7,000 and over were reported to have high rates of hospital insurance coverage (73 percent), but they represented only 16 percent of the total population of persons dying.

In each income category, the nonwhite decedents had significantly lower coverage rates than the white decedents. This white-nonwhite differential was greatest at the lower income levels.

The hospital insurance coverage for white decedents was almost twice as high as the rate for nonwhite decedents in the two lowest income categories (table 5).

The influence of income on the differences in the amount of coverage for white and nonwhite decedents can be seen in table K.

A disproportionately large number of nonwhite decedents (60 percent as compared with 42 percent for white decedents) were members of families with incomes less than \$2,000 (table H). When health insurance coverage is adjusted for income, however, the adjusted rates for nonwhite decedents were still lower than the adjusted rates for white decedents (table K).

When comparing the levels of health insurance coverage between males and females within each income class (table 6) it must be remembered that, in general, the females were older and coverage was generally lower for older decedents

Table J. Percent distribution of decedents 25 years and over and percent of decedents with hospital insurance, by family income: United States, 1964-65

Family income	Percent distribution of decedents 25 years and over	Percent of decedents with hospital insurance
All incomes--	100.0	47.8
Under \$2,000-----	43.5	29.5
\$2,000-\$3,999-----	22.0	50.4
\$4,000-\$6,999-----	18.2	65.4
\$7,000 and over----	16.2	73.0

regardless of income. The rates of coverage for males were higher than for females in each income level except for decedents in the lowest income level (less than \$2,000). The higher rates of coverage for males may be due, in part, to the fact that since males are more likely to have been members of the working force than females, they may have had better access to health insurance plans through their place of employment.

Table 7 shows the health insurance coverage for decedents by whether they lived with relatives or alone, and income. The highest rates of coverage for hospital insurance (62 percent) were observed for those decedents who lived only with their spouses. About 51 percent of the decedents who lived with relatives other than just their spouses had hospital insurance while only 41 percent of those decedents who either lived alone or with nonrelatives were covered by hospital insurance. For decedents who were residents of institutions at the time of their death, the proportion having hospital insurance coverage was only 28 percent. Within each of these living arrangements, the level of coverage increased with each successive income level.

Because coverage is related to income, the median incomes within each living arrangement by hospital insurance coverage have been computed and are shown in figure 2. Although the decedents who were living only with their spouses at the time of death were reported to have the

highest rate of hospital insurance coverage, they did not have the highest median income. The decedents who lived with relatives other than spouses had the highest median income—\$4,788. It would appear that other factors besides the level of income may influence the rate of health insurance coverage among decedents. However, it must be remembered that the income used in this report refers to the income of all members of the decedent's household. The high median income for decedents who lived with relatives other than spouse may reflect several different sources of income but does not necessarily indicate the amount of money available to the decedent for use for health insurance.

Family income becomes a more useful measure when the size of the family sharing the income is considered (table 8). Among all decedents, the highest rates of health insurance coverage were observed for the two-person family. As family size increased to three and four or more persons, the proportion covered by health insurance decreased slightly. The lowest coverage was among those decedents classified as one-person families. The coverage rates for these single individuals was about one-half as great as for the two-person family. However, 53 percent of these single individuals were residents of institutions at the time of their death.

Within each of the income categories there were some variations in the patterns of coverage by family size. The two-person family had the highest health insurance coverage in all income

Table K. Effect of income adjustment on the rates of hospital and surgical insurance coverage, by color: United States, 1964-65

Color	Hospital insurance		Surgical insurance	
	Unadjusted	Adjusted	Unadjusted	Adjusted
	Percent			
White----	50.4	49.5	38.8	38.1
Nonwhite-	26.4	33.0	19.0	24.3

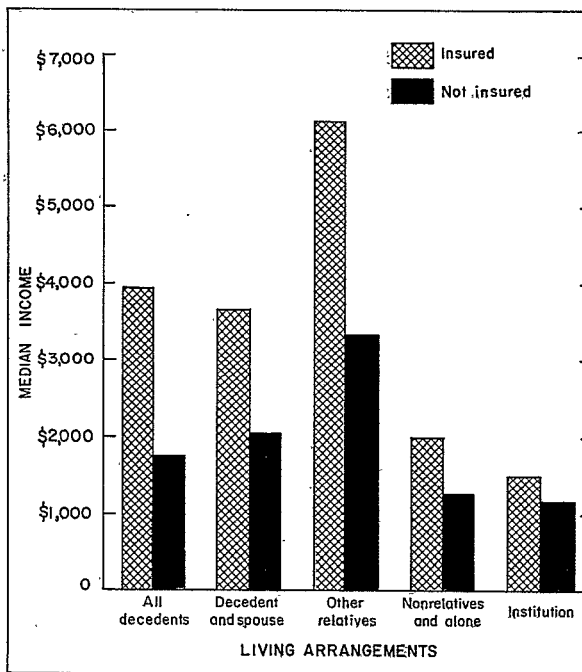


Figure 2. Median family income of decedents 25 years and over, by hospital insurance coverage and living arrangements.

categories. The lowest coverage in the middle income classes (\$2,000-\$6,999) was observed for decedents who were members of a family with four or more persons. However, the lowest coverage for health insurance in the lowest and highest income categories was observed for persons who lived alone who were institutionalized at the time of death.

For decedents in the lowest income category (less than \$2,000) there was no appreciable difference between the hospital insurance coverage for single decedents (26 percent) and decedents in families of three and four or more members (25 and 28 percent respectively). It appears that families in this lowest income category did not have money available for health insurance regardless of the size of the family.

In all regions, the proportion of the decedents with health insurance increased in successive levels of income (table 9). It is interesting to note that in the West the level of coverage in each income category was lower than the coverage reported for decedents in the same income cat-

egory in each of the other regions. The low coverage in the West is not due, therefore, to the income distribution of the decedents within the region. The West did not differ significantly from the other regions with respect to the proportion of the decedent population within each income category.

Not only did each income level in the West have a lower rate of coverage than was observed in the other regions, but the difference in hospital insurance coverage between the lowest and highest income groups was also largest in the West. The coverage for decedents in families with the highest incomes in the West was almost three times greater than the coverage for decedents in families with incomes less than \$2,000. In the Northeast, the rates for decedents in families with incomes of \$7,000 and over was only about twice as high as the rates for decedents in families with incomes less than \$2,000.

Marital Status

Of the adults dying during 1964 and 1965, about 9 percent were single, 52 percent were married, 34 percent were widowed, and 5 percent were divorced. Table 10 shows that health insurance coverage was highest for married persons. Almost 60 percent of those individuals who were married at the time of death had insurance for hospital expenses, while 46 percent had insurance for surgical expenses. Those decedents who were

Table 1. Effect of age adjustment on rate of hospital and surgical insurance coverage, by marital status: United States, 1964-65

Marital status	Hospital insurance		Surgical insurance	
	Unadjusted	Adjusted	Unadjusted	Adjusted
	Percent			
Single---	34.8	34.9	27.4	27.1
Married--	59.0	55.2	46.3	42.1
Widowed--	35.9	37.4	25.8	29.0
Divorced-	33.8	32.9	26.2	24.7

widowed were covered at the rate of 36 and 26 percent for hospital and surgical insurance respectively. The groups with the lowest health insurance coverage were the single and divorced. Only about one-half as many single or divorced decedents had hospital or surgical insurance as decedents who were married.

The age distribution within each marital status affected the rates of coverage for health insurance (table 11). Married decedents again showed higher rates of coverage in all age groups than was reported for decedents in all other marital statuses. The amount of coverage was similar for single, widowed, and divorced decedents aged 65 and over.

Table L shows the effect of age adjustment on the rates of hospital and surgical insurance coverage by marital status.

Even after adjustment the rates for hospital and surgical insurance coverage are higher for married decedents than for single, widowed, or divorced decedents.

Patterns of coverage for males and females within each marital status were somewhat different from the coverage pattern for all decedents. Single females showed a significantly higher rate of coverage than single males. About 43 percent of the single females as opposed to only 29 percent of the single males had hospital insurance.

Table M, based on table 12, shows the proportion of decedents in each income level by marital status. The high rates of coverage for married decedents may be due in part to their higher incomes. Only 32 percent of the married decedents had incomes less than \$2,000; 55 percent of the widowed decedents, 60 percent of the single decedents, and 56 percent of the divorced decedents were in this lowest income category. Married decedents also had the highest proportion in the \$7,000 and over income category (20 percent) as compared with 14 percent for widowed decedents and about 9 percent for single and divorced decedents.

Table M. Percent distribution of decedents 25 years and over, by family income according to marital status: United States, 1964-65

Family income	Marital status			
	Married	Widowed	Single	Divorced
	Percent distribution			
All incomes-----	100.0	100.0	100.0	100.0
Under \$2,000-----	31.7	55.3	60.1	56.3
\$2,000-\$3,999-----	26.9	16.7	16.5	17.2
\$4,000-\$6,999-----	21.8	14.2	14.0	16.6
\$7,000 and over-----	19.6	13.8	9.4	9.9

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Table 1. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to sex and age: United States, 1964-65 National Mortality Survey

Sex and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance		
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured	
<u>Both sexes</u>		Average number of decedents in thousands					Percent distribution				
All ages, 25+ years-	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4	
25-44 years----	108	58	51	51	58	100.0	53.0	47.0	46.9	53.1	
45-54 years----	162	96	65	82	80	100.0	59.5	40.5	50.7	49.3	
55-64 years----	285	174	111	141	144	100.0	61.2	38.8	49.4	50.6	
65+ years-----	1,094	459	634	330	763	100.0	42.0	58.0	30.2	69.8	
65-74 years--	432	222	210	168	264	100.0	51.4	48.6	38.9	61.1	
75-84 years--	450	181	269	128	322	100.0	40.2	59.8	28.4	71.6	
85+ years----	212	57	155	35	177	100.0	26.7	73.3	16.4	83.6	
<u>Male</u>											
All ages, 25+ years-	928	465	463	368	560	100.0	50.1	49.9	39.6	60.4	
25-44 years----	67	34	33	30	38	100.0	50.5	49.5	44.2	55.8	
45-54 years----	103	60	43	52	51	100.0	58.1	41.9	50.1	49.9	
55-64 years----	185	113	72	92	93	100.0	60.9	39.1	49.6	50.4	
65+ years-----	572	258	314	194	377	100.0	45.1	54.9	34.0	66.0	
65-74 years--	258	136	121	107	151	100.0	52.9	47.1	41.4	58.6	
75-84 years--	228	96	132	70	158	100.0	42.2	57.8	30.9	69.1	
85+ years----	86	25	61	17	69	100.0	29.3	70.7	19.9	80.1	
<u>Female</u>											
All ages, 25+ years-	721	323	399	236	485	100.0	44.7	55.3	32.8	67.2	
25-44 years----	41	23	18	21	20	100.0	57.1	42.9	51.4	48.6	
45-54 years----	59	36	22	30	28	100.0	62.1	37.9	51.7	48.3	
55-64 years----	99	61	38	49	51	100.0	61.6	38.4	49.0	51.0	
65+ years-----	522	201	321	136	386	100.0	38.6	61.4	26.1	73.9	
65-74 years--	174	86	89	61	113	100.0	49.0	51.0	35.1	64.9	
75-84 years--	222	84	137	57	165	100.0	38.1	61.9	25.8	74.2	
85+ years----	126	31	94	18	108	100.0	25.0	75.0	13.9	86.0	

Table 2. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to color and age: United States, 1964-65 National Mortality Survey

Color and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>Total</u>	Average number of decedents in thousands					Percent distribution				
All ages, 25+ years-	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
25-44 years----	108	58	51	51	58	100.0	53.0	47.0	46.9	53.1
45-54 years----	162	96	65	82	80	100.0	59.5	40.5	50.7	49.3
55-64 years----	285	174	111	141	144	100.0	61.2	38.8	49.4	50.6
65+ years-----	1,094	459	634	330	763	100.0	42.0	58.0	30.2	69.8
65-74 years--	432	222	210	168	264	100.0	51.4	48.6	38.9	61.1
75-84 years--	450	181	269	128	322	100.0	40.2	59.8	28.4	71.6
85+ years----	212	57	155	35	177	100.0	26.7	73.3	16.4	83.6
<u>White</u>										
All ages, 25+ years-	1,467	739	728	569	898	100.0	50.4	49.6	38.8	61.2
25-44 years----	82	50	32	44	38	100.0	60.9	39.1	53.5	46.5
45-54 years----	134	88	45	75	58	100.0	66.1	33.9	56.2	43.8
55-64 years----	244	159	84	132	112	100.0	65.4	34.6	54.1	45.9
65+ years-----	1,008	442	566	319	689	100.0	43.8	56.2	31.6	68.4
65-74 years--	386	212	174	161	225	100.0	54.9	45.1	41.8	58.2
75-84 years--	421	175	246	123	298	100.0	41.6	58.4	29.3	70.7
85+ years----	200	54	146	34	167	100.0	27.1	72.9	16.8	83.2
<u>Nonwhite</u>										
All ages, 25+ years-	181	48	133	35	147	100.0	26.4	73.6	19.0	81.0
25-44 years----	26	8	19	7	19	100.0	28.6	71.4	26.5	73.5
45-54 years----	28	8	20	7	21	100.0	28.5	71.5	24.5	75.5
55-64 years----	41	15	26	9	32	100.0	36.0	64.1	21.8	78.2
65+ years-----	86	18	68	12	74	100.0	20.5	79.5	13.6	86.4
65-74 years--	46	10	36	7	39	100.0	21.7	78.3	14.2	85.8
75-84 years--	28	5	23	4	24	100.0	19.0	81.0	14.7	85.3
85+ years----	11	*	*	*	*	100.0	*	*	*	*

Table 3. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to geographic region and division: United States, 1964-65 National Mortality Survey

Geographic region and division	All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured
Average number of decedents in thousands					
All regions-----	1,649	787	861	604	1,045
Northeast-----	462	246	217	190	273
New England-----	104	55	49	46	58
Middle Atlantic-----	358	191	168	144	214
North Central-----	476	241	235	188	288
East North Central-----	331	175	156	138	192
West North Central-----	145	66	79	50	96
South-----	474	201	273	146	328
South Atlantic-----	226	99	128	73	154
East South Central-----	105	40	65	27	78
West South Central-----	142	62	80	46	96
West-----	237	100	136	81	156
Mountain-----	57	29	28	23	34
Pacific-----	180	71	109	58	122
Percent distribution					
All regions-----	100.0	47.8	52.2	36.6	63.4
Northeast-----	100.0	53.1	46.9	41.0	59.0
New England-----	100.0	52.8	47.2	43.9	56.1
Middle Atlantic-----	100.0	53.2	46.8	40.2	59.8
North Central-----	100.0	50.7	49.3	39.5	60.5
East North Central-----	100.0	52.9	47.1	41.8	58.2
West North Central-----	100.0	45.5	54.5	34.1	65.9
South-----	100.0	42.3	57.7	30.7	69.3
South Atlantic-----	100.0	43.7	56.3	32.1	67.9
East South Central-----	100.0	38.1	61.9	25.6	74.4
West South Central-----	100.0	43.4	56.6	32.3	67.7
West-----	100.0	42.3	57.7	34.1	65.9
Mountain-----	100.0	51.7	48.3	40.4	59.6
Pacific-----	100.0	39.3	60.7	32.2	67.8

Table 4. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to geographic region and age; and color and age for all regions and the South Region: United States, 1964-65 National Mortality Survey

Geographic region, color, and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>ALL REGIONS</u>										
<u>Total</u>										
Average number of decedents in thousands										
Percent distribution										
All ages, 25+ years-	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
25-64 years----	555	328	227	274	281	100.0	59.1	40.9	49.3	50.7
65+ years-----	1,094	459	634	330	763	100.0	42.0	58.0	30.2	69.8
<u>White</u>										
All ages, 25+ years-	1,467	739	728	569	898	100.0	50.4	49.6	38.8	61.2
25-64 years----	459	298	162	251	209	100.0	64.8	35.2	54.6	45.4
65+ years-----	1,008	442	566	319	689	100.0	43.8	56.2	31.6	68.4
<u>Nonwhite</u>										
All ages, 25+ years-	181	48	133	35	147	100.0	26.4	73.6	19.0	81.0
25-64 years----	96	30	65	23	73	100.0	31.7	68.3	23.9	76.1
65+ years-----	86	18	68	12	74	100.0	20.5	79.5	13.6	86.4
<u>NORTHEAST</u>										
All ages, 25+ years-	462	246	217	190	273	100.0	53.1	46.9	41.0	59.0
25-64 years----	144	95	49	83	61	100.0	66.0	34.0	57.3	42.7
65+ years-----	318	150	168	107	211	100.0	47.3	52.7	33.7	66.3
<u>NORTH CENTRAL</u>										
All ages, 25+ years-	476	241	235	188	288	100.0	50.7	49.3	39.5	60.5
25-64 years----	144	93	51	79	66	100.0	64.8	35.2	54.5	45.5
65+ years-----	332	148	184	109	223	100.0	44.5	55.5	32.9	67.1

Table 4. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to geographic region and age; and color and age for all regions and the South Region: United States, 1964-65 National Mortality Survey—Con.

Geographic region, color, and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>WEST</u>	Average number of decedents in thousands					Percent distribution				
All ages, 25+ years-	237	100	136	81	156	100.0	42.3	57.7	34.1	65.9
25-64 years----	85	46	39	41	43	100.0	54.3	45.7	48.9	51.1
65+ years-----	152	54	98	39	113	100.0	35.6	64.4	25.9	74.1
<u>SOUTH</u>										
<u>Total</u>										
All ages, 25+ years-	474	201	273	146	328	100.0	42.3	57.7	30.7	69.3
25-64 years----	182	94	89	71	111	100.0	51.4	48.6	39.0	61.0
65+ years-----	292	107	185	75	217	100.0	36.7	63.3	25.6	74.5
<u>White</u>										
All ages, 25+ years-	371	175	196	131	240	100.0	47.2	52.8	35.3	64.7
25-64 years----	130	77	53	62	68	100.0	59.3	40.7	47.5	52.5
65+ years-----	241	98	143	69	172	100.0	40.8	59.3	28.7	71.3
<u>Nonwhite</u>										
All ages, 25+ years-	103	25	78	15	88	100.0	24.7	75.3	14.2	85.8
25-64 years----	52	17	36	9	43	100.0	31.7	68.3	17.9	82.1
65+ years-----	51	9	42	5	46	100.0	17.5	82.5	10.5	89.5

Table 5. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to family income, color, and age: United States, 1964-65 National Mortality Survey

Family income, color, and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>ALL INCOMES</u>										
<u>Total</u>										
Average number of decedents in thousands						Percent distribution				
All ages, 25+-	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
25-64 years----	555	328	227	274	281	100.0	59.1	40.9	49.3	50.7
65+ years-----	1,094	459	634	330	763	100.0	42.0	58.0	30.2	69.8
<u>White</u>										
All ages, 25+-	1,467	739	728	569	898	100.0	50.4	49.6	38.8	61.2
25-64 years----	459	298	162	251	209	100.0	64.8	35.2	54.6	45.4
65+ years-----	1,008	442	566	319	689	100.0	43.8	56.2	31.6	68.4
<u>Nonwhite</u>										
All ages, 25+-	181	48	133	35	147	100.0	26.4	73.6	19.0	81.0
25-64 years----	96	30	65	23	73	100.0	31.7	68.3	23.9	76.1
65+ years-----	86	18	68	12	74	100.0	20.5	79.5	13.6	86.4
<u>UNDER \$2,000</u>										
<u>Total</u>										
All ages, 25+-	717	212	505	152	565	100.0	29.5	70.5	21.2	78.8
25-64 years----	155	42	112	34	121	100.0	27.3	72.7	21.9	78.1
65+ years-----	563	170	393	118	445	100.0	30.2	69.8	21.0	79.0
<u>White</u>										
All ages, 25+-	609	193	416	139	469	100.0	31.7	68.3	22.9	77.1
25-64 years----	104	33	71	28	76	100.0	31.7	68.3	26.5	73.5
65+ years-----	505	160	345	112	393	100.0	31.7	68.3	22.1	77.9
<u>Nonwhite</u>										
All ages, 25+-	109	19	90	13	96	100.0	17.3	82.7	11.8	88.2
25-64 years----	51	9	42	6	45	100.0	18.3	81.7	12.5	87.5
65+ years-----	58	10	48	7	51	100.0	16.5	83.5	11.3	88.7

Table 5. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to family income, color, and age: United States, 1964-65 National Mortality Survey—Con.

Family income, color, and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
\$2,000-\$3,999										
<u>Total</u>										
Average number of decedents in thousands										
Percent distribution										
All ages, 25+-	363	183	180	137	226	100.0	50.4	49.6	37.9	62.1
25-64 years----	114	58	56	47	67	100.0	50.6	49.4	41.3	58.7
65+ years-----	249	125	124	90	159	100.0	50.4	49.6	36.3	63.7
<u>White</u>										
All ages, 25+-	321	170	152	128	194	100.0	52.8	47.2	39.7	60.3
25-64 years----	91	49	42	40	50	100.0	54.2	45.8	44.6	55.4
65+ years-----	231	121	110	87	144	100.0	52.3	47.7	37.8	62.2
<u>Nonwhite</u>										
All ages, 25+-	42	13	28	10	32	100.0	32.0	68.0	23.6	76.4
25-64 years----	23	9	15	7	17	100.0	36.7	63.3	28.6	71.4
65+ years-----	18	*	*	*	*	100.0	*	*	*	*
\$4,000-\$6,999										
<u>Total</u>										
All ages, 25+-	301	197	104	153	147	100.0	65.4	34.6	50.9	49.1
25-64 years----	148	110	38	89	59	100.0	74.3	25.7	60.3	39.7
65+ years-----	152	87	66	64	89	100.0	56.8	43.2	41.8	58.2
<u>White</u>										
All ages, 25+-	277	185	92	145	132	100.0	66.9	33.1	52.2	47.8
25-64 years----	131	101	30	82	49	100.0	76.9	23.1	62.8	37.2
65+ years-----	146	85	61	62	84	100.0	58.0	42.0	42.7	57.3
<u>Nonwhite</u>										
All ages, 25+-	24	11	12	9	15	100.0	48.1	51.9	36.1	63.9
25-64 years----	17	*	*	*	*	100.0	*	*	*	*
65+ years-----	6	*	*	*	*	100.0	*	*	*	*
\$7,000+										
<u>Total</u>										
All ages, 25+-	268	196	72	161	106	100.0	73.0	27.0	60.3	39.7
25-64 years----	138	118	20	103	35	100.0	85.4	14.6	74.7	25.3
65+ years-----	130	78	52	58	72	100.0	59.8	40.2	44.8	55.2
<u>White</u>										
All ages, 25+-	261	191	69	158	102	100.0	73.4	26.6	60.7	39.3
25-64 years----	134	115	19	101	33	100.0	85.8	14.2	75.1	24.9
65+ years-----	126	76	50	57	69	100.0	60.3	39.7	45.4	54.6
<u>Nonwhite</u>										
All ages, 25+-	7	*	*	*	*	100.0	*	*	*	*

Table 6. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to family income, sex, and age: United States, 1964-65 National Mortality Survey

Family income, sex, and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
ALL INCOMES										
Both sexes										
Average number of decedents in thousands					Percent distribution					
All ages, 25+-	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
25-64 years----	555	328	227	274	281	100.0	59.1	40.9	49.3	50.7
65+ years-----	1,094	459	634	330	763	100.0	42.0	58.0	30.2	69.8
Male										
All ages, 25+-	928	465	463	368	560	100.0	50.1	49.9	39.6	60.4
25-64 years----	356	207	149	173	183	100.0	58.1	41.9	48.7	51.3
65+ years-----	572	258	314	194	377	100.0	45.1	54.9	34.0	66.0
Female										
All ages, 25+-	721	323	399	236	485	100.0	44.7	55.3	32.8	67.2
25-64 years----	199	121	78	100	99	100.0	60.8	39.2	50.3	49.7
65+ years-----	522	201	321	136	386	100.0	38.6	61.4	26.1	73.9
UNDER \$2,000										
Both sexes										
All ages, 25+-	717	212	505	152	565	100.0	29.5	70.5	21.2	78.8
25-64 years----	155	42	112	34	121	100.0	27.3	72.7	21.9	78.1
65+ years-----	563	170	393	118	445	100.0	30.2	69.8	21.0	79.0
Male										
All ages, 25+-	364	103	261	77	287	100.0	28.3	71.7	21.2	78.8
25-64 years----	91	21	70	18	73	100.0	23.0	77.0	19.8	80.2
65+ years-----	273	82	191	59	214	100.0	30.0	70.0	21.6	78.4
Female										
All ages, 25+-	353	109	244	75	278	100.0	30.8	69.2	21.2	78.8
25-64 years----	63	21	42	16	47	100.0	33.4	66.6	25.0	75.0
65+ years-----	290	88	202	59	230	100.0	30.3	69.7	20.4	79.6
\$2,000-\$3,999										
Both sexes										
All ages, 25+-	363	183	180	137	226	100.0	50.4	49.6	37.9	62.1
25-64 years----	114	58	56	47	67	100.0	50.6	49.4	41.3	58.7
65+ years-----	249	125	124	90	159	100.0	50.4	49.6	36.3	63.7
Male										
All ages, 25+-	225	118	106	90	135	100.0	52.6	47.4	40.1	59.9
25-64 years----	75	37	38	29	45	100.0	49.4	50.6	39.3	60.7
65+ years-----	150	81	69	61	89	100.0	54.2	45.8	40.5	59.5
Female										
All ages, 25+-	138	65	73	47	91	100.0	46.9	53.1	34.2	65.8
25-64 years----	39	21	18	18	21	100.0	53.1	46.9	45.3	54.7
65+ years-----	99	44	55	30	70	100.0	44.5	55.5	29.8	70.2

Table 6. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to family income, sex, and age: United States, 1964-65 National Mortality Survey—Con.

Family income, sex, and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>\$4,000-\$6,999</u>										
<u>Both sexes</u>	Average number of decedents in thousands					Percent distribution				
All ages, 25+-	301	197	104	153	147	100.0	65.4	34.6	50.9	49.1
25-64 years----	148	110	38	89	59	100.0	74.3	25.7	60.3	39.7
65+ years-----	152	87	66	64	89	100.0	56.8	43.2	41.8	58.2
<u>Male</u>										
All ages, 25+-	181	123	58	99	82	100.0	67.8	32.2	54.8	45.2
25-64 years----	99	72	27	59	39	100.0	72.9	27.1	60.1	39.9
65+ years-----	82	51	32	40	42	100.0	61.6	38.4	48.4	51.6
<u>Female</u>										
All ages, 25+-	119	74	46	54	66	100.0	61.9	38.2	45.1	54.9
25-64 years----	49	38	11	30	19	100.0	77.0	23.0	60.7	39.3
65+ years-----	70	36	34	24	46	100.0	51.2	48.8	34.2	65.8
<u>\$7,000+</u>										
<u>Both sexes</u>										
All ages, 25+-	268	196	72	161	106	100.0	73.0	27.0	60.3	39.7
25-64 years----	138	118	20	103	35	100.0	85.4	14.6	74.7	25.3
65+ years-----	130	78	52	58	72	100.0	59.8	40.2	44.8	55.2
<u>Male</u>										
All ages, 25+-	157	121	36	101	56	100.0	76.8	23.2	64.4	35.6
25-64 years----	91	77	14	67	24	100.0	84.7	15.3	73.3	26.7
65+ years-----	66	44	23	35	32	100.0	66.1	33.9	52.1	47.9
<u>Female</u>										
All ages, 25+-	111	75	36	60	50	100.0	67.7	32.3	54.4	45.6
25-64 years----	48	41	6	37	11	100.0	86.9	13.1	77.4	22.6
65+ years-----	63	34	29	23	40	100.0	53.3	46.7	37.0	62.9

Table 7. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to living arrangements and family income: United States, 1964-65 National Mortality Survey

Living arrangements and family income	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>All living arrangements</u>	Average number of decedents in thousands					Percent distribution				
All incomes--	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
Under \$2,000---	717	212	505	152	565	100.0	29.5	70.5	21.2	78.8
\$2,000-\$3,999--	363	183	180	137	226	100.0	50.4	49.6	37.9	62.1
\$4,000-\$6,999--	301	197	104	153	147	100.0	65.4	34.6	50.9	49.1
\$7,000+-----	268	196	72	161	106	100.0	73.0	27.0	60.3	39.7
<u>Decedent and spouse only</u>										
All incomes--	451	278	173	214	237	100.0	61.5	38.5	47.5	52.5
Under \$2,000---	149	63	87	44	105	100.0	42.1	57.9	29.5	70.5
\$2,000-\$3,999--	147	92	55	69	78	100.0	62.5	37.5	47.1	52.8
\$4,000-\$6,999--	90	69	21	55	35	100.0	77.0	23.0	61.0	39.0
\$7,000+-----	64	53	11	46	19	100.0	82.9	17.1	71.1	28.9
<u>Lived with other relatives</u>										
All incomes--	616	313	303	241	375	100.0	50.8	49.2	39.1	60.9
Under \$2,000---	126	33	93	22	104	100.0	26.4	73.6	17.7	82.3
\$2,000-\$3,999--	136	50	86	38	98	100.0	37.0	63.0	27.9	72.1
\$4,000-\$6,999--	174	102	72	78	96	100.0	58.8	41.2	44.6	55.4
\$7,000+-----	180	127	53	103	77	100.0	70.6	29.4	57.4	42.6
<u>Lived with nonrelatives or alone</u>										
All incomes--	275	111	164	86	188	100.0	40.5	59.5	31.5	68.5
Under \$2,000---	190	57	133	43	146	100.0	29.9	70.1	22.9	77.1
\$2,000-\$3,999--	43	24	19	18	25	100.0	56.3	43.7	41.6	58.4
\$4,000-\$6,999--	26	19	7	16	10	100.0	74.3	25.7	62.8	37.2
\$7,000+-----	16	*	*	*	*	100.0	*	*	*	*
<u>Institution</u>										
All incomes--	306	85	221	62	244	100.0	27.8	72.2	20.2	79.8
Under \$2,000---	252	59	193	42	210	100.0	23.4	76.6	16.8	83.3
\$2,000-\$3,999--	37	17	20	12	25	100.0	45.2	54.8	33.0	67.0
\$4,000-\$6,999--	11	*	*	*	*	100.0	*	*	*	*
\$7,000+-----	7	*	*	*	*	100.0	*	*	*	*

Table 8. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to family income and family size: United States, 1964-65 National Mortality Survey

Family income and family size	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>All incomes</u>	Average number of decedents in thousands					Percent distribution				
All families--	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
One person-----	581	197	385	148	433	100.0	33.8	66.2	25.5	74.5
Two persons----	568	326	242	250	318	100.0	57.4	42.6	44.0	56.0
Three persons--	228	122	106	95	133	100.0	53.5	46.5	41.7	58.3
Four or more persons-----	271	142	129	110	161	100.0	52.5	47.5	40.7	59.3
<u>Under \$2,000</u>										
All families--	717	212	505	152	565	100.0	29.5	70.5	21.2	78.8
One person-----	442	116	326	86	356	100.0	26.2	73.8	19.4	80.6
Two persons----	194	75	119	53	141	100.0	38.4	61.6	27.1	72.9
Three persons--	41	10	31	8	34	100.0	25.2	74.8	18.3	81.7
Four or more persons-----	41	11	29	6	34	100.0	27.8	72.2	15.5	84.5
<u>\$2,000-\$3,999</u>										
All families--	363	183	180	137	226	100.0	50.4	49.6	37.9	62.1
One person-----	80	41	39	30	50	100.0	51.1	48.9	37.7	62.3
Two persons----	176	103	73	77	99	100.0	58.6	41.4	43.9	56.1
Three persons--	55	23	32	17	38	100.0	42.1	57.9	31.3	68.7
Four or more persons-----	52	16	36	13	39	100.0	30.7	69.3	24.7	75.3
<u>\$4,000-\$6,999</u>										
All families--	301	197	104	153	147	100.0	65.4	34.6	50.9	49.1
One person-----	37	25	12	21	16	100.0	68.6	31.5	56.0	44.0
Two persons----	116	84	33	65	51	100.0	72.0	28.0	56.3	43.7
Three persons--	69	45	24	34	34	100.0	65.1	34.9	50.1	49.9
Four or more persons-----	79	43	36	33	46	100.0	54.6	45.4	41.3	58.7
<u>\$7,000+</u>										
All families--	268	196	72	161	106	100.0	73.0	27.0	60.3	39.7
One person-----	23	15	8	12	11	100.0	64.4	35.6	52.4	47.6
Two persons----	82	65	17	55	27	100.0	79.1	20.9	66.5	33.5
Three persons--	63	44	19	36	27	100.0	69.2	30.8	57.0	43.0
Four or more persons-----	99	72	27	58	41	100.0	72.5	27.5	59.0	41.0

Table 9. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to region and family income: United States, 1964-65 National Mortality Survey

Region and family income	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>All regions</u>	Average number of decedents in thousands					Percent distribution				
All incomes--	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
Under \$2,000---	717	212	505	152	565	100.0	29.5	70.5	21.2	78.8
\$2,000-\$3,999--	363	183	180	137	226	100.0	50.4	49.6	37.9	62.1
\$4,000-\$6,999--	301	197	104	153	147	100.0	65.4	34.6	50.9	49.1
\$7,000+-----	268	196	72	161	106	100.0	73.0	27.0	60.3	39.7
<u>Northeast</u>										
All incomes--	462	246	217	190	273	100.0	53.1	46.9	41.0	59.0
Under \$2,000---	185	61	124	46	139	100.0	33.1	66.9	24.7	75.3
\$2,000-\$3,999--	101	59	42	43	58	100.0	58.4	41.6	42.3	57.7
\$4,000-\$6,999--	90	61	28	51	39	100.0	68.5	31.5	56.8	43.2
\$7,000+-----	87	64	23	50	36	100.0	73.7	26.3	58.2	41.8
<u>North Central</u>										
All incomes--	476	241	235	188	288	100.0	50.7	49.3	39.5	60.5
Under \$2,000---	205	64	140	48	156	100.0	31.4	68.6	23.7	76.3
\$2,000-\$3,999--	101	57	44	45	56	100.0	56.3	43.7	44.5	55.5
\$4,000-\$6,999--	92	60	31	46	45	100.0	66.0	34.0	50.4	49.6
\$7,000+-----	78	59	19	48	30	100.0	75.7	24.3	61.3	38.7
<u>South</u>										
All incomes--	474	201	273	146	328	100.0	42.3	57.7	30.7	69.3
Under \$2,000---	228	62	165	40	187	100.0	27.3	72.7	17.7	82.3
\$2,000-\$3,999--	109	46	63	32	76	100.0	42.0	58.0	29.8	70.2
\$4,000-\$6,999--	79	51	27	37	41	100.0	65.2	34.8	47.5	52.5
\$7,000+-----	59	42	17	36	23	100.0	70.5	29.5	60.5	39.5
<u>West</u>										
All incomes--	237	100	136	81	156	100.0	42.3	57.7	34.1	65.9
Under \$2,000---	100	24	76	18	82	100.0	24.1	75.9	17.6	82.4
\$2,000-\$3,999--	52	22	31	17	35	100.0	41.4	58.6	33.2	66.8
\$4,000-\$6,999--	40	24	17	19	22	100.0	58.1	41.9	45.8	54.2
\$7,000+-----	44	31	13	27	17	100.0	70.5	29.5	62.2	37.8

Table 10. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to sex and marital status: United States, 1964-65 National Mortality Survey

Sex and marital status	All decedents	Hospital insurance		Surgical insurance		
		Insured	Not insured	Insured	Not insured	
<u>Both sexes</u>		Average number of decedents in thousands				
All statuses-----	1,649	787	861	604	1,045	
Married-----	859	507	352	398	461	
Widowed-----	568	204	364	146	422	
Single-----	147	51	96	40	107	
Divorced-----	74	25	49	19	55	
<u>Male</u>						
All statuses-----	928	465	463	368	560	
Married-----	610	358	252	281	329	
Widowed-----	183	69	115	53	130	
Single-----	88	25	62	21	66	
Divorced-----	47	13	33	12	35	
<u>Female</u>						
All statuses-----	721	323	399	236	485	
Married-----	249	149	100	117	132	
Widowed-----	385	136	249	93	292	
Single-----	60	26	34	19	41	
Divorced-----	28	12	16	8	20	
<u>Both sexes</u>		Percent distribution				
All statuses-----	100.0	47.8	52.2	36.6	63.4	
Married-----	100.0	59.0	41.0	46.3	53.7	
Widowed-----	100.0	35.9	64.1	25.8	74.2	
Single-----	100.0	34.8	65.2	27.4	72.6	
Divorced-----	100.0	33.8	66.2	26.2	73.8	
<u>Male</u>						
All statuses-----	100.0	50.1	49.9	39.6	60.4	
Married-----	100.0	58.6	41.4	46.1	53.9	
Widowed-----	100.0	37.4	62.6	29.1	70.9	
Single-----	100.0	29.0	71.0	24.3	75.7	
Divorced-----	100.0	28.4	71.6	25.5	74.5	
<u>Female</u>						
All statuses-----	100.0	44.7	55.3	32.8	67.2	
Married-----	100.0	59.9	40.1	46.8	53.2	
Widowed-----	100.0	35.2	64.8	24.2	75.8	
Single-----	100.0	43.3	56.7	32.0	68.0	
Divorced-----	100.0	42.9	57.1	27.2	72.8	

Table 11. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to marital status and age: United States, 1964-65 National Mortality Survey

Marital status and age	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>All statuses</u>	Average number of decedents in thousands					Percent distribution				
All ages, 25+ years-	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
25-44 years----	108	58	51	51	58	100.0	53.0	47.0	46.9	53.1
45-54 years----	162	96	65	82	80	100.0	59.5	40.5	50.7	49.3
55-64 years----	285	174	111	141	144	100.0	61.2	38.8	49.4	50.6
65+ years-----	1,094	459	634	330	763	100.0	42.0	58.0	30.2	69.8
65-74 years--	432	222	210	168	264	100.0	51.4	48.6	38.9	61.1
75-84 years--	450	181	269	128	322	100.0	40.2	59.8	28.4	71.6
85+ years----	212	57	155	35	177	100.0	26.7	73.3	16.4	83.6
<u>Married</u>										
All ages, 25+ years-	859	507	352	398	461	100.0	59.0	41.0	46.3	53.7
25-44 years----	82	50	32	44	38	100.0	61.2	38.8	53.5	46.5
45-54 years----	118	79	40	66	52	100.0	66.3	33.7	56.0	44.0
55-64 years----	201	137	64	111	90	100.0	68.3	31.7	55.1	44.9
65+ years-----	458	241	217	177	281	100.0	52.7	47.3	38.7	61.3
65-74 years--	248	145	103	111	137	100.0	58.5	41.5	44.6	55.4
75-84 years--	170	83	87	59	112	100.0	48.8	51.2	34.4	65.6
85+ years----	40	13	27	8	32	100.0	32.8	67.2	19.4	80.6
<u>Widowed</u>										
All ages, 25+ years-	568	204	364	146	422	100.0	35.9	64.1	25.8	74.2
25-44 years----	*	*	*	*	*	*	*	*	*	*
45-54 years----	16	*	*	*	*	100.0	*	*	*	*
55-64 years----	44	21	22	17	27	100.0	48.8	51.2	39.4	60.6
65+ years-----	506	176	330	122	384	100.0	34.8	65.2	24.2	75.8
65-74 years--	127	57	70	41	86	100.0	44.6	55.4	32.5	67.5
75-84 years--	230	81	149	58	172	100.0	35.3	64.7	25.1	74.9
85+ years----	150	38	111	23	126	100.0	25.7	74.3	15.5	84.5
<u>Single</u>										
All ages, 25+ years-	147	51	96	40	107	100.0	34.8	65.2	27.4	72.6
25-44 years----	17	*	*	*	*	100.0	*	*	*	*
45-54 years----	15	*	*	*	*	100.0	*	*	*	*
55-64 years----	24	10	14	8	16	100.0	41.6	58.4	33.6	66.4
65+ years-----	91	29	61	22	69	100.0	32.3	67.7	24.2	75.8
65-74 years--	37	13	24	11	26	100.0	36.0	64.0	28.9	71.1
75-84 years--	36	12	24	8	28	100.0	34.3	65.7	23.3	76.7
85+ years----	17	*	*	*	*	100.0	*	*	*	*
<u>Divorced</u>										
All ages, 25+ years-	74	25	49	19	55	100.0	33.8	66.2	26.2	73.8
25-44 years----	7	*	*	*	*	100.0	*	*	*	*
45-54 years----	12	*	*	*	*	100.0	*	*	*	*
55-64 years----	16	*	*	*	*	100.0	*	*	*	*
65+ years-----	39	13	26	9	30	100.0	32.5	67.5	23.2	76.8
65-74 years--	20	7	13	5	15	100.0	34.7	65.3	25.8	74.2
75-84 years--	14	*	*	*	*	100.0	*	*	*	*
85+ years----	*	*	*	*	*	*	*	*	*	*

Table 12. Average annual number and percent distribution of decedents 25 years and over, by hospital and surgical insurance coverage according to marital status and family income: United States, 1964-65 National Mortality Survey

Marital status and family income	All decedents	Hospital insurance		Surgical insurance		All decedents	Hospital insurance		Surgical insurance	
		Insured	Not insured	Insured	Not insured		Insured	Not insured	Insured	Not insured
<u>All statuses</u>	Average number of decedents in thousands					Percent distribution				
All incomes--	1,649	787	861	604	1,045	100.0	47.8	52.2	36.6	63.4
Under \$2,000---	717	212	505	152	565	100.0	29.5	70.5	21.2	78.8
\$2,000-\$3,999--	363	183	180	137	226	100.0	50.4	49.6	37.9	62.1
\$4,000-\$6,999--	301	197	104	153	147	100.0	65.4	34.6	50.9	49.1
\$7,000+-----	268	196	72	161	106	100.0	73.0	27.0	60.3	39.7
<u>Married</u>										
All incomes--	859	507	352	398	461	100.0	59.0	41.0	46.3	53.7
Under \$2,000---	272	100	173	70	203	100.0	36.6	63.4	25.6	74.4
\$2,000-\$3,999--	231	130	101	99	132	100.0	56.3	43.7	42.9	57.1
\$4,000-\$6,999--	187	138	49	109	78	100.0	73.8	26.2	58.5	41.5
\$7,000+-----	168	139	29	119	49	100.0	82.5	17.5	70.9	29.1
<u>Widowed</u>										
All incomes--	568	204	364	146	422	100.0	35.9	64.1	25.8	74.2
Under \$2,000---	315	86	228	63	251	100.0	27.5	72.5	20.1	79.9
\$2,000-\$3,999--	95	37	58	26	69	100.0	38.8	61.2	27.4	72.6
\$4,000-\$6,999--	81	38	43	27	54	100.0	47.1	52.9	33.0	67.0
\$7,000+-----	79	43	35	31	48	100.0	54.9	45.1	39.1	60.9
<u>Single</u>										
All incomes--	147	51	96	40	107	100.0	34.8	65.2	27.4	72.6
Under \$2,000---	88	17	71	13	75	100.0	19.7	80.3	14.8	85.2
\$2,000-\$3,999--	24	11	13	8	16	100.0	47.2	52.8	34.3	65.7
\$4,000-\$6,999--	21	13	8	11	9	100.0	62.9	37.1	54.7	45.3
\$7,000+-----	14	*	*	*	*	100.0	*	*	*	*
<u>Divorced</u>										
All incomes--	74	25	49	19	55	100.0	33.8	66.2	26.2	73.8
Under \$2,000---	42	8	34	6	36	100.0	19.9	80.1	14.2	85.8
\$2,000-\$3,999--	13	*	*	*	*	100.0	*	*	*	*
\$4,000-\$6,999--	12	*	*	*	*	100.0	*	*	*	*
\$7,000+-----	7	*	*	*	*	100.0	*	*	*	*

APPENDIX I

TECHNICAL NOTES ON METHODS

Background of This Report

The data presented in this report were collected in the 1964 and 1965 National Mortality Surveys (NMS). These surveys, conducted by the National Center for Health Statistics, were designed primarily to provide information about the decedent's hospital or institutional episodes during his last year of life, the costs of this care, and how these costs were paid. In addition, certain socioeconomic and demographic data which were thought to be relevant to the study were collected.

Sources of Data

The first source of data in the surveys was the death certificate. Additional sources were a questionnaire mailed to the person who provided the funeral director with the personal information for recording on the death certificate, and a questionnaire mailed to the hospital or institution in which the decedent died. These sources of information, which were identified on the death record, are referred to as primary sources.

Each primary source was requested to identify other individuals who might be able to complete the questionnaire if the respondent was unable to do so and other medical facilities which provided care to the decedent during the year prior to his death. These additional sources of information are referred to as secondary sources. Identical questionnaires were sent to these secondary sources requesting information concerning the decedent.

The data shown in this report are based on information obtained from the death certificate and from the responses to the questionnaire sent to the death certificate informant. Age, sex, color, and region were tabulated from entries on the death certificate; hospital and surgical insurance, marital status, living arrangements, family size, and family income were tabulated from information on the questionnaire.

Sample Design

The sample design for the National Mortality Survey takes advantage of the virtually complete registration of deaths in the United States. Each month, the 54 registration areas forward a 10 percent systematic sample of all registered deaths to the Division of Vital Statistics, National Center for Health Statistics. This systematic sample is called the Current Mortality Sample (CMS). The sample for the National Mortality Survey is a probability sample subselected from the CMS at a rate of 1 out of 33 deaths. This procedure yields an overall selection rate of 1 out of 330 deaths. There were 5,153 deaths of persons aged 1 year and over in the 1964 sample and 5,255 deaths, in the 1965 sample. Because the samples are independent they can be combined, giving a total sample size of 10,408.

Death Certificate and Questionnaires

Facsimiles of the Standard Certificate of Death and of the questionnaires used in this survey are shown in appendix III. Although not all States use the standard certificate, all States *do* include on their certificates items requesting the basic information used in this report. The questionnaire sent to the death record informant was designed to obtain information on health insurance coverage, and the names and addresses of hospitals and institutions which provided care to the decedent during the year before his death. Additional questions concerned the amount of the hospital bill, household composition, assets, and family income.

In 1964 and 1965, three questionnaires were used for decedents aged 1 year and over depending on the age at death and place of residence of the decedent. Similar information was collected with each questionnaire. However, the reference individual for certain questions on socioeconomic status differed.

When the decedent was age 14 or over and *was not* a resident of an institution at the time of death, the socioeconomic questions referred to the decedent's status.

When the decedent was age 14 or over and *was* a resident of an institution at the time of death, the questions pertaining to the decedent's household composition were omitted.

When the decedent was age 1-13 the socioeconomic question referred to the status of the decedent's parents. Only the information obtained from questionnaires 1 and 2 were used for this report.

Collection of the Data

Data for the 1964-65 NMS were collected primarily by mail. If the address was given on the certificate, questionnaires were sent by regular mail to the person providing the funeral director with the decedent's personal information for recording on the certificate. For those cases where the address of the informant was not available on the death certificate, a letter was first sent to the funeral director requesting the address of the informant and then a questionnaire was mailed to the informant.

If no response to the questionnaire was received after 2 weeks, a second questionnaire was sent by certified mail. If there was no response to the certified mail after 3 weeks, a third questionnaire was sent by regular first-class mail. If there was no response to the third questionnaire and if the informant was a resident of one of the primary sampling units (PSU's) designated by the Bureau of the Census, a final attempt to collect the information was made by personal interviews conducted by the Bureau of the Census.

In addition, special letters were sent to the respondent to clarify the information when the reported data were inadequate for certain essential items.

These procedures resulted in a response rate in 1964-65 of 91 percent (table I). In general, the rates of responses were higher for all characteristics from the death certificate for white decedents than for non-white decedents. In each color group the response rates were higher for older decedents than for young ones.

Included among the 938 nonrespondent cases are cases where the respondent refused to answer the questions, where it was impossible to locate an informant, and where no questionnaire was sent because the decedent's usual place of residence as reported on the death certificate was outside the United States, even though the death occurred in the United States. In ad-

dition, New Mexico did not participate in the 1964-65 National Mortality Survey.

Processing of the Data

The completed questionnaires were edited and coded in accordance with predetermined specifications. The questionnaires were checked both for completeness and for consistency of response. After the edited and coded data had been transcribed onto punchcards, the data were processed on electronic computers. The computer processing included range edits, consistency checks, assignments of weights, and imputation for missing data.

Nonresponse and Imputation for Missing Data

Failure to obtain a response represents one of the biggest problems in any survey. Out of the 10,408 decedents aged 1 year and over who were included in the survey during 1964 and 1965, no information was available after all attempts to contact the respondent for only 938 decedents or 9 percent of the sample. These are referred to as "unit nonresponses." Table I shows the percent responding by selected characteristics,

In addition to unit nonresponse, there is also item nonresponse, i.e., the respondent returned the questionnaire but omitted part of the information. The following table shows the nonresponse rates for the items from the questionnaire which are presented in this report:

Hospital insurance-----	1.0 percent
Surgical insurance-----	1.5 percent
Family income -----	1.6 percent

Item nonresponse cannot be shown for family size and living arrangements since these were not specific items on the questionnaire. They were derived from entries in the household listing on the questionnaire.

In general, item nonresponse was low, reflecting no more than 1.6 percent of the respondents for any particular item. The highest item nonresponse rate among those items included in this report was observed for questions on income.

Statistics derived from the National Mortality Survey were adjusted for both types of nonresponse by imputing to nonrespondents, on an item basis, the characteristics of similar respondents. An array of known values from respondents was created in the computer using 40 age, sex, and color groups to establish similarity between respondents. The groups used for imputations are as follows:

Group

Sex, color, and age

Male, white:

- 1----- Under 1 year
- 2----- 1-14 years
- 3----- 15-24 years
- 4----- 25-34 years
- 5----- 35-44 years
- 6----- 45-54 years
- 7----- 55-64 years
- 8----- 65-74 years
- 9----- 75-84 years
- 10----- 85 years and over

Male, nonwhite:

- 11-20----- Same age groups as for male, white

Female, white:

- 21-30----- Same age groups as for male, white

Female, nonwhite:

- 31-40----- Same age groups as for male, white

Other variables were added to the array in the imputation of certain items in order to maintain internal consistency within the record. For example, in order to impute the information on the number of children in the decedent's household, it was necessary to control for such characteristics as the family size and the type of family.

Values in the cells of the array were continually replaced by successive known values as the file was processed. The values from the last complete record in each were then imputed to the nonresponse record.

This method of imputation is possible because age, sex, and color are recorded on the death certificate and are known for each decedent regardless of whether there was a response to the questionnaire.

Weighting Procedures for National Estimates

Statistics shown in this report are national estimates prepared by use of a poststratified ratio estimation procedure. This estimation procedure, which takes the total number of registered deaths into account in the estimation process, reduces the sampling error by making the sample more closely representative of the population of all deaths than would be expected by random methods alone.

Table I. Response rates for 1964-65 National Mortality Survey, by selected characteristics: United States, decedents aged 1 year and over

Characteristic	Total		White		Nonwhite	
	Number in sample	Percent responding	Number in sample	Percent responding	Number in sample	Percent responding
Total-----	10,408	91.0	9,222	91.4	1,186	87.6
<u>Age</u>						
1-14 years-----	202	81.7	153	81.7	49	81.6
15-24 years-----	187	86.6	159	86.2	28	89.3
25-34 years-----	197	89.3	143	90.9	54	85.2
35-44 years-----	479	88.9	359	90.5	120	84.2
45-54 years-----	936	88.5	784	88.6	152	87.5
55-64 years-----	1,730	88.3	1,484	88.1	246	89.8
65-74 years-----	2,627	91.8	2,354	92.4	273	86.8
75-84 years-----	2,754	93.0	2,559	93.4	195	88.2
85+ years-----	1,296	93.6	1,227	93.6	69	92.8
<u>Sex</u>						
Male-----	5,885	90.6	5,219	91.0	666	87.7
Female-----	4,523	91.5	4,003	92.0	520	87.5
<u>Region</u>						
Northeast-----	2,874	90.5	2,676	91.3	198	79.8
North Central-----	3,002	92.1	2,800	92.5	202	87.1
South-----	3,014	91.8	2,338	92.3	676	90.2
West-----	1,518	88.1	1,408	88.2	110	86.4

For each of the 40 cells that were used for imputation, the national count of deaths for the appropriate year was obtained from *Vital Statistics of the United States*, Vol. II, Mortality.⁸

A weight for each cell was then calculated by dividing the number of sample deaths into the number of registered deaths for each year of the survey.

The product of the weight and the sample count equaled the national total for the cell. The national estimates for 1964 and 1965 were averaged to produce the average annual estimates shown in this report.

Reliability of Estimates

Since the statistics derived from this survey are based on a sample, they may differ from the results that would have been obtained had a census covering all decedents been undertaken using the same questionnaires and procedures. In addition to sampling errors, results from any data-collection system are subject to errors in conceptual formulation, ambiguities in definitions and in the questionnaire construction, coding errors, biases due to nonresponse or incomplete response, mistakes in editing, and tabulation errors.

The probability design of the sample for the National Mortality Survey makes possible the calculation of sampling errors. The sampling error is a measure of the sampling variation that occurs by chance because only a sample rather than the entire population is surveyed.

Estimates of sampling variability for the statistics derived from this survey were computed by creating 20 random half-sample replications. This technique yields a measure of overall variability through observation of variability among random subsamples of the total sample. It reflects the error that arises from sampling and a part of the measurement error, but it does not measure any systematic biases in the data. A general discussion of the development and evaluation of the replication technique for estimating variance has been published elsewhere.⁹

Using the same questionnaire and collection procedures, chances are about 68 out of 100 that an estimate from the sample differs from the value for the entire population by less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error.

Rules to determine the approximate standard error for estimates presented in this report are as follows:

1. *Estimates of aggregates.*—Approximate standard errors of estimates of the number of decedents with a given characteristic are given in table II.
2. *Estimates of percentages.*—Approximate standard errors for percentages are determined in one of the following ways, depending on the source of the base of the percentage:
 - a. Where both the numerator and denominator are estimates from the sample data, the approximate standard errors are shown in table III.
 - b. Where the denominator is a value found in one of the cells used in the imputation and estimation procedures, the relative standard error of the percent is equivalent to the relative standard error of the numerator since the denominator is not subject to sampling error. These are given in table II.
3. *Difference between two sample estimates.*—The standard error of a difference between two sample estimates is approximately the square root of the sum of the squares of each standard error considered separately. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics, although it is only a rough approximation in other cases.

Standardization Procedure

The age and income standardized rates of health insurance coverage shown in this report were calcu-

Table II. Approximate standard errors for estimated numbers shown in this report

Size of estimate	Standard error	Relative standard error
5,000-----	610	12.2
10,000-----	900	9.0
25,000-----	1,550	6.2
50,000-----	2,350	4.7
100,000-----	3,100	3.1
250,000-----	4,900	2.0
500,000-----	6,300	1.3
750,000-----	6,900	0.9
1,000,000-----	7,500	0.8

Table III. Approximate standard errors for percentages shown in this report

Base of percentage	Estimated percent				
	2 or 98	5 or 95	10 or 90	25 or 75	50
10,000-----	1.8	2.4	3.4	4.9	5.7
25,000-----	1.0	1.8	2.2	3.2	3.6
50,000-----	0.8	1.3	1.7	2.5	2.9
100,000-----	0.6	0.9	1.2	1.8	2.0
250,000-----	0.4	0.6	0.8	1.1	1.3
500,000-----	0.3	0.4	0.5	0.8	0.9
750,000-----	0.2	0.3	0.4	0.7	0.8
1,000,000-----	0.2	0.3	0.4	0.6	0.6

lated by the direct method of standardization. The age and income specific rates of coverage for hospital and surgical insurance were applied to the estimated population of all decedents aged 25 years and over to produce the standardized rate.

Rounding of Numbers

Although the published tables show aggregates rounded to the nearest thousands, the tabulations on which the tables are based show figures to the nearest unit. All computations were made using the unrounded data. Therefore, the reader making computations using the published tables may not be able to reproduce the computations exactly.



APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Information From the Death Certificate

Color.—For purposes of classification for this survey, the category "white" includes those individuals reported on the death certificate as white, Mexican, Puerto Rican, and Cuban. The category "nonwhite" includes those reported as Negro, American Indian, Chinese, Japanese, Hawaiian, Part-Hawaiian, and "other nonwhite."

Age.—The age recorded on the death certificate under age or date of birth is the decedent's age at last birthday.

Sex.—Sex is coded as recorded on the death certificate.

Institutional residence.—Inmates of institutions were identified by the entry on the death certificate under usual place of residence. If the decedent's usual residence was reported as a hospital, nursing home, or other resident institution the decedent was considered to be an inmate of an institution.

Region and division.—The States in which the deaths occurred are classified into four regions which are further subdivided into 9 divisions corresponding to those used by the Bureau of the Census. These regions and divisions are as follows:

<i>Region</i>	<i>Division</i>	<i>States Included</i>
Northeast-----	New England -----	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut
	Middle Atlantic-----	New York, New Jersey, Pennsylvania
North Central-----	East North Central -----	Ohio, Indiana, Illinois, Michigan, Wisconsin
	West North Central -----	Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas
South-----	South Atlantic -----	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida
	East South Central -----	Kentucky, Tennessee, Alabama, Mississippi
	West South Central -----	Arkansas, Louisiana, Oklahoma, Texas
West-----	Mountain-----	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada
	Pacific-----	Washington, Oregon, California, Alaska, Hawaii

Information From the Questionnaires

Health insurance.—For purposes of this survey, health insurance was defined as any plan specifically designed to pay all or part of the medical or hospital expenses of the insured individual. The plan, in order to be considered insurance, must have been a formal one with defined membership and benefits. The insuring organization may have been either a nonprofit group or a commercial group. If the question arose, the medical care which is provided to uniformed services personnel and their dependents (Dependent Medical Care Program) was not considered to be health insurance.

Hospital insurance.—Plans included as hospital insurance were those which pay all or part of the bills for hospital care.

Surgical insurance.—Plans included as surgical insurance were those which pay all or part of the surgeon's bill.

Living arrangements.—For those decedents who were not residents of institutions, the household listing which included space for entries on marital status and the relationship of each member to the decedent was used to determine the living arrangements used in this report. Living arrangements refer to whether the decedent lived with spouse, with other relatives, alone

or with nonrelatives, or lived in an institution at the time of death.

Family size.—Family size refers to the total number of individuals related to the decedent who resided in the same household. This includes head of family and all persons related to him by blood, marriage, or adoption. Decedents who were residents of institutions were classified as being members of one-person families.

Family income.—Family income refers to the total of all income received during last full calendar year by all persons related to the decedent by blood, marriage, or adoption and living in the same household as the decedent at the time of his death. If the decedent lived alone, lived with nonrelatives, or was institutionalized, the income refers only to his individual income. For persons dying in 1964, the income shown here was that received in 1963; for those dying in 1965, the income was that received in 1964.

Marital status.—Although this item is reported on the death certificate, the marital status used in this report was coded from the entries in the household listing on the questionnaire. The decedents classified as married include decedents who were reported to be separated.



APPENDIX III
SOURCE FORMS
Death Certificate

CERTIFICATE OF DEATH

Form approved
Budget Bureau No. 68-R375 2.

BIRTH NO.		STATE OF		STATE FILE NO.	
1. PLACE OF DEATH a. COUNTY			2. USUAL RESIDENCE (If deceased lived, if institution: Residence before admission) a. STATE b. COUNTY		
b. CITY, TOWN, OR LOCATION		c. LENGTH OF STAY IN 1b	c. CITY, TOWN, OR LOCATION		
d. NAME OF HOSPITAL OR INSTITUTION <i>(If not in hospital, give street address)</i>			d. STREET ADDRESS		
e. IS PLACE OF DEATH INSIDE CITY LIMITS? YES <input type="checkbox"/> NO <input type="checkbox"/>		e. IS RESIDENCE INSIDE CITY LIMITS? YES <input type="checkbox"/> NO <input type="checkbox"/>	f. IS RESIDENCE ON A FARM? YES <input type="checkbox"/> NO <input type="checkbox"/>		
3. NAME OF DECEASED (Type or print) <i>First Middle Last</i>			4. DATE OF DEATH <i>Month Day Year</i>		
5. SEX	6. COLOR OR RACE	7. MARRIED <input type="checkbox"/> NEVER MARRIED <input type="checkbox"/> WIDOWED <input type="checkbox"/> DIVORCED <input type="checkbox"/>	8. DATE OF BIRTH	9. AGE (In years last birthday) <i>Months Days Hours Min.</i>	10. USUAL OCCUPATION (Give kind of work done during most of working life, even if retired)
10a. USUAL OCCUPATION (Give kind of work done during most of working life, even if retired)		10b. KIND OF BUSINESS OR INDUSTRY	11. BIRTHPLACE (State or foreign country)	12. CITIZEN OF WHAT COUNTRY?	
13. FATHER'S NAME			14. MOTHER'S MAIDEN NAME		
15. WAS DECEASED EVER IN U.S. ARMED FORCES? <i>(Yes, no, or unknown)</i> <i>(If yes, give year or dates of service)</i>		16. SOCIAL SECURITY NO.	17. INFORMANT <i>Address</i>		
18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).] PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a) _____ Conditions, if any, which gave rise to above cause (a), stating the underlying cause last. DUE TO (b) _____ DUE TO (c) _____ PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a) _____					INTERVAL BETWEEN ONSET AND DEATH
20a. ACCIDENT <input type="checkbox"/>	SUICIDE <input type="checkbox"/>	HOMICIDE <input type="checkbox"/>	20b. DESCRIBE HOW INJURY OCCURRED. <i>(Enter nature of injury in Part I or Part II of item 18.)</i>		
20c. TIME OF INJURY <i>Hour a. m. p. m. Month, Day, Year</i>			20d. INJURY OCCURRED WHILE AT WORK <input type="checkbox"/> NOT WHILE AT WORK <input type="checkbox"/>		
20e. PLACE OF INJURY <i>(e. g., in or about home, farm, factory, street, office bldg., etc.)</i>		20f. CITY, TOWN, OR LOCATION	COUNTY	STATE	
21. I attended the deceased from _____, to _____ and last saw her/him alive on _____ Death occurred at _____ m on the date stated above; and to the best of my knowledge, from the causes stated.					
22a. SIGNATURE <i>(Degree or title)</i>			22b. ADDRESS	22c. DATE SIGNED	
23a. BURIAL, CREMATION, REMOVAL <i>(Specify)</i>	23b. DATE	23c. NAME OF CEMETERY OR CREMATORY	23d. LOCATION <i>(City, town, or county)</i>	STATE <i>(State)</i>	
24. FUNERAL DIRECTOR ADDRESS		25. DATE RECD. BY LOCAL REG.	26. REGISTRAR'S SIGNATURE		

1956 REVISION OF STANDARD CERTIFICATE
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—PUBLIC HEALTH SERVICE
MEDICAL CERTIFICATION
PHS-708 REV. 11/54

Informant Questionnaires

Death Outside Institution



NATIONAL CENTER FOR
HEALTH STATISTICS

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
WASHINGTON, D.C. 20201

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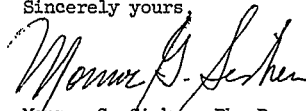
The U. S. Public Health Service is conducting a survey to obtain information about people who died during 1965. The survey is being conducted as part of a program to collect urgently needed information about the health problems of the Nation. This study will provide information about the health of the American people. What is learned may help to reduce the hazards of disabling illness and avoidable deaths.

For one out of every 330 deaths occurring throughout the country, facts are being collected about health insurance coverage, use of hospitals and institutions, and finances during the year prior to death. The sample for this survey was scientifically designed so that every person dying during 1965 had the same chance of being selected.

The person named below is in the sample and our records indicate that you are most likely to have the information we need. If you do not have the exact answer to a question, give your best estimate. Your reply will be held strictly confidential and will be used to get total figures only. The identity of individuals will not be disclosed for any purpose.

The success of this study depends upon our having information about every death. Your reply is important. Even if you have not answered all the questions, please mail the completed form within five days in the enclosed envelope which requires no postage. Your cooperation and prompt attention to this request will be appreciated.

Sincerely yours,



Monroe G. Sirken, Ph. D.
Chief, Division of Health
Records Statistics

Name of Deceased Person _____ File Number _____

HL-1-5

NATIONAL MORTALITY SAMPLE SURVEY - 1965

PART I. HEALTH INSURANCE

We are interested in finding out if the deceased person was covered by health insurance at any time during the 12-month period before death. Please report on each kind of health insurance protection whether or not the insurance was used.

- | | |
|---|--|
| 1. During the 12-month period before death, did the deceased person have health insurance to pay for hospital care?

<input type="checkbox"/> Yes <input type="checkbox"/> No | 2. What about a surgeon's bill? During the 12-month period before death, did the deceased person have health insurance to pay surgeons' bills?

<input type="checkbox"/> Yes <input type="checkbox"/> No |
|---|--|

PART II. HOSPITAL AND INSTITUTION CARE IN LAST YEAR OF LIFE

In this part, we are interested in finding out about the hospitals, nursing homes, sanatoriums, and similar places which provided medical or personal care services to the deceased person during the 12-month period before death. We are also interested in finding out about the bills and who paid them.

1. Since _____ (including the time just before death), was the deceased person a patient in any hospital, nursing home, home for the aged, or other type of institution that provided medical or personal care?

Yes (continue below) No (skip to part III on next page)

Write name and location of each place

Name	City and State

2. During the 12-month period before death, about how much did the hospital bills for this care come to; that is, amounts paid by the deceased person, by health insurance, or by relatives or friends of the deceased person? (Do not include any part provided by public or private agencies.)

If exact amount not known, please check your best estimate.

- Less than \$100
 \$100 - \$249
 \$250 - \$499
 \$500 - \$999
 \$1,000 and over

3. What part of the hospital bills for the deceased person was paid by health insurance?

None 1/2 up to 3/4
 Less than 1/2 3/4 or more

4. Was any part of the bills paid by the deceased person's children or other relatives (other than spouse, if married) who usually lived in the household with the deceased person?

Yes No

5. Was any part of the bills paid by the deceased person's children or other relatives NOT living in the household with the deceased person, or by friends?

Yes No

6. Did the deceased person receive care in places during the 12-month period before death which was provided free, or which was paid for by any of the following?

(check as many as apply)

- Veterans Administration
- Medical assistance for the aged or other public assistance
- Public Health Department
- Non-profit health agency, such as "Polio Foundation"
- Other welfare organization
- Workmens' Compensation
- A public hospital, nursing home, or clinic
- Some other hospital, nursing home, or clinic
- Other

↳ What was that? (Write in)

7. Were any operations performed on the deceased person during the 12-month period before death?

Yes No

What part of the surgeon's (doctor's) bill was paid by any kind of insurance?

None 1/2 up to 3/4
 Less than 1/2 3/4 or more

PART III. HOUSEHOLD COMPOSITION

This part is concerned with everyone who usually lived in the same household with the deceased person at the time of death. (Include infants and small children)

1. How many people were living together in the same household as the deceased at the time of death, including the deceased person? ↓

Number

2. Who was head of this household?

- The deceased person
- Another person (Write in name of head)

3. On the following lines, enter the names and provide the information requested below for all persons who usually lived in the same household as the deceased person at the time of death.

(LAST NAME)	(FIRST NAME)	Relationship to the deceased person (son, mother-in-law, step-daughter, lodger, etc.)	Male or Female	Birth Date ____/____/____ Month Year	Marital status at time of deceased person's death—		
					Married	Widowed	Divorced Separated Single (never married)
(1)		Deceased person					
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							
(11)							

(If more space is needed, continue on a separate sheet)

PART IV. ASSETS

This part is concerned with the total value of things owned by the deceased person, if the deceased person was married and was living with spouse, answer for both husband and wife together.

1. Did the deceased person and spouse, if married and living together, own a home (include buying) at the time of death?

- Yes No

2. Did the deceased person (and spouse) have any money in banks, credit unions, savings and loan associations, etc.?

- Yes No

3. Did the deceased person (and spouse) own a business or farm?

- Yes No

4. Did the deceased person (and spouse) have other assets such as stocks and bonds, business or real estate investments, etc., at the time of death?

- Yes No

5. Did the deceased (and spouse) have any other kind of assets such as an automobile, jewelry, etc.?

- Yes No

6. What would you judge to be the total value of things owned by the deceased person (and spouse) after any debts or mortgages were paid off?

(check the item which agrees with your estimate)

- | | |
|--|--|
| <input type="checkbox"/> None | <input type="checkbox"/> \$5,000-\$9,999 |
| <input type="checkbox"/> Under \$1,000 | <input type="checkbox"/> \$10,000-\$24,999 |
| <input type="checkbox"/> \$1,000-\$4,999 | <input type="checkbox"/> \$25,000 and over |

PART V. INCOME

This part is about the income of the deceased person and other related persons living with the deceased at the time of death.

1. State whether the deceased person (and spouse, if married and living together) received income during 1964 from any of the following sources: (check "yes" or "no" for each item)

- | | | |
|--------------------------|--------------------------|---|
| Yes | No | |
| <input type="checkbox"/> | <input type="checkbox"/> | Wages, salary, or commission |
| <input type="checkbox"/> | <input type="checkbox"/> | Own business, professional practice or partnership, or working on own farm |
| <input type="checkbox"/> | <input type="checkbox"/> | Dividends, interest on savings accounts or bonds, or income from annuities, estates, or trusts |
| <input type="checkbox"/> | <input type="checkbox"/> | Rental of property, or boarders or lodgers |
| <input type="checkbox"/> | <input type="checkbox"/> | Social Security |
| <input type="checkbox"/> | <input type="checkbox"/> | Veterans payments or other government or private pensions |
| <input type="checkbox"/> | <input type="checkbox"/> | Welfare payments |
| <input type="checkbox"/> | <input type="checkbox"/> | Other sources including unemployment or sickness benefits, regular contributions from non-resident relatives, alimony, etc. |
| <input type="checkbox"/> | <input type="checkbox"/> | Other |
| | | ↳ What was that? (Write in) |

2. What was the total money income of the deceased person (and spouse, if married and living together) from all sources in 1964? (Check the box that agrees with your best estimate)

- | | |
|--|--|
| <input type="checkbox"/> None | <input type="checkbox"/> \$3,000-\$3,999 |
| <input type="checkbox"/> Under \$1,000 | <input type="checkbox"/> \$4,000-\$4,999 |
| <input type="checkbox"/> \$1,000-\$1,499 | <input type="checkbox"/> \$5,000-\$6,999 |
| <input type="checkbox"/> \$1,500-\$1,999 | <input type="checkbox"/> \$7,000-\$9,999 |
| <input type="checkbox"/> \$2,000-\$2,999 | <input type="checkbox"/> \$10,000 and over |

3a. Were there family members who usually lived in the same household with the deceased person (not counting the spouse of the deceased person) who had money income in 1964?

- Yes (continue below) No (skip to Part VI below)

3b. How much did the income of the family members amount to in 1964?

- Under \$2,000
 \$2,000-\$3,999
 \$4,000-\$6,999
 \$7,000 or over

3c. Taken together then, what was the total money income of the family from all sources in 1964?

(Check the box which agrees with your best estimate)

Include income of the deceased person, spouse, and other family members who usually lived with the deceased person.

- Under \$1,000
 \$1,000-\$1,499
 \$1,500-\$1,999
 \$2,000-\$2,999
 \$3,000-\$3,999
 \$4,000-\$4,999
 \$5,000-\$6,999
 \$7,000-\$9,999
 \$10,000 and over

PART VI. SOURCES OF INFORMATION

Please answer the questions in this part about yourself and about another person who could provide additional information about the deceased person.

1. Who completed this form?

Name
Street Address
City and State
Telephone Number

Was the deceased person related to you?

- Yes No

Deceased person was your _____
 (relationship)

2. Is there another person who might be able to add to the information you have provided?

- Yes No

Name
Street Address
City and State

Was the deceased person related to this person?

- Yes No

Deceased person was this person's _____
 (relationship)

Death In Institution



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
WASHINGTON, D.C. 20201

NATIONAL CENTER FOR
HEALTH STATISTICS

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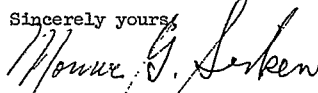
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The person named below is in the sample and our records indicate that you are most likely to have the information we need. If you do not have the exact answer to a question, give your best estimate. Your reply will be held strictly confidential and will be used to get total figures only. The identity of individuals will not be disclosed for any purpose.

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Sincerely yours,

Monroe G. Sirken, Ph. D.
Chief, Division of Health
Records Statistics

Name of Deceased _____ File Number _____

I4-1-5

NATIONAL MORTALITY SAMPLE SURVEY - 1965

PART I. HEALTH INSURANCE

We are interested in finding out if the deceased person was covered by health insurance at any time during the 12-month period before death. Please report on each kind of health insurance protection *whether or not the insurance was used.*

- | | |
|---|--|
| 1. During the 12-month period before death, did the deceased person have health insurance to pay for <i>hospital care</i> ?

<input type="checkbox"/> Yes <input type="checkbox"/> No | 2. What about the surgeon's bill? During the 12-month period before death, did the deceased person have health insurance to pay <i>surgeons' bills</i> ?

<input type="checkbox"/> Yes <input type="checkbox"/> No |
|---|--|

PART II. HOSPITAL AND INSTITUTION CARE IN LAST YEAR OF LIFE

In this part, we are interested in finding out about the hospitals, nursing homes, sanitoriums, and similar places which provided medical or personal care services to the deceased person during the 12-month period before death. We are also interested in finding out about the bills and who paid them.

- | | |
|--|---|
| 1. Complete the information below about the institution in which the deceased person was a patient at the time of death. | 3. During the 12-month period before death, about how much did the bills for care in these places come to, not counting any part provided by public or private agencies? (Include amounts paid by the deceased person and spouse, by health insurance, or by relatives or friends of the deceased person) |
|--|---|

Name of Institution		
City	State	
When did the deceased enter this institution?		
Month	Day	Year

- If exact amount not known, please check your best estimate. Include bills for care in hospitals, nursing homes, homes for the aged, and other institutions providing health or personal care
- Less than \$100
 \$100 - \$299
 \$300 - \$499
 \$500 - \$999
 \$1,000 and over

- | | |
|--|---|
| 2. During the 12-month period prior to death, was the deceased person a patient in any other hospital, nursing home, home for the aged, or other type of institution that provided medical or personal care?

<input type="checkbox"/> Yes <input type="checkbox"/> No | 4. What part of these hospital bills was paid by health insurance?

<input type="checkbox"/> None
<input type="checkbox"/> Less than 1/2
<input type="checkbox"/> 1/2 up to 3/4
<input type="checkbox"/> 3/4 or more |
|--|---|

↓
Write name and location of each place:

Name	City and State

5. Was any part of the bills paid by the deceased person's children or other relatives (other than spouse, if married), or by friends?

 Yes No

PART II. HOSPITAL AND INSTITUTION CARE IN LAST YEAR OF LIFE (continued)

6. During the 12-month period before death, did the deceased person receive hospital care which was provided free, or which was paid for, by any of the following?

(Check as many as apply)

- Veterans Administration
- Medical assistance for the aged or other public assistance
- Public Health Department
- Non-profit health agency
- Other welfare organization
- Workmens' Compensation
- A public hospital, nursing home or clinic
- Some other hospital, nursing home, or clinic
- Other

↳ What was that? (Write in)

7. Were any operations performed on the deceased person during the 12-month period before death?

Yes No



What part of the surgeon's (doctor's) bill was paid by any kind of insurance?

- None
- Less than 1/2
- 1/2 up to 3/4
- 3/4 or more

PART III. INFORMATION ABOUT THE DECEASED PERSON

1. When was the deceased person born?

Month	Year

2. At the time of death, was the deceased person:

- Married Divorced
- Widowed Legally separated
- Single (never married)

PART IV. ASSETS

This part is concerned with the total value of things owned by the deceased person (and spouse, if married).

1. Did the deceased person (and spouse) own a home (include buying) at the time of death?

Yes No

2. Did the deceased person (and spouse) have any money in banks, credit unions, savings and loan associations, etc.?

Yes No

3. Did the deceased person (and spouse) own a business or farm?

Yes No

4. Did the deceased person (and spouse) have other assets such as stocks and bonds, business or real estate investments, etc., at the time of death?

Yes No

5. Did the deceased (and spouse) have any other kind of assets such as an automobile, jewelry, etc.?

Yes No

6. What would you judge to be the total value of things owned by the deceased person (and spouse) after any debts or mortgages were paid off?

(Check the box which agrees with your estimate)

- None \$5,000-\$9,999
- Under \$1,000 \$10,000-\$24,999
- \$1,000-\$4,999 \$25,000 and over

PART V. INCOME

This part is about the income of the deceased person.

1. State whether the deceased person received income during 1964 from the following sources:

(Check "yes" or "no" for each item)

Yes No

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Wages, salary or commission |
| <input type="checkbox"/> | <input type="checkbox"/> | Own business, professional practice or partnership, or working on own farm |
| <input type="checkbox"/> | <input type="checkbox"/> | Dividends, interest on savings accounts or bonds, or income from annuities, estates or trusts |
| <input type="checkbox"/> | <input type="checkbox"/> | Rental of property, or boarders or lodgers |
| <input type="checkbox"/> | <input type="checkbox"/> | Social Security |
| <input type="checkbox"/> | <input type="checkbox"/> | Veterans payments or other government or private pensions |
| <input type="checkbox"/> | <input type="checkbox"/> | Welfare payments |
| <input type="checkbox"/> | <input type="checkbox"/> | Other sources including unemployment or sickness benefits, regular contributions from relatives, alimony, etc. |

2. What was the total money income of the deceased person from all sources in 1964?

(Check the box that agrees with your best estimate)

- None
- Under \$1,000
- \$1,000 - \$1,499
- \$1,500 - \$1,999
- \$2,000 - \$2,999
- \$3,000 - \$3,999
- \$4,000 - \$4,999
- \$5,000 - \$6,999
- \$7,000 - \$9,999
- \$10,000 and over

PART VI. SOURCES OF INFORMATION

Please answer the questions in this part about yourself and about another person who could provide additional information about the deceased person.

1. Who completed this form?

Name
Street Address
City and State
Telephone Number

Was the deceased person related to you?

Yes No

↓

Deceased person was your _____
(relationship)

2. Is there another person who might be able to add to the information you have provided?

Yes No

Name
Street Address
City and State

Was the deceased person related to this person?

Yes No

↓

Deceased person was this person's _____
(relationship)

Use the space below for additional comments.

OUTLINE OF REPORT SERIES FOR VITAL AND HEALTH STATISTICS

Public Health Service Publication No. 1000

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- Series 2. Data evaluation and methods research.*—Studies of new statistical methodology including: experimental tests of new survey methods, studies of vital statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, contributions to statistical theory.
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- Series 13. Data from the Hospital Discharge Survey.*—Statistics relating to discharged patients in short-stay hospitals, based on a sample of patient records in a national sample of hospitals.
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- Series 21. Data on natality, marriage, and divorce.*—Various statistics on natality, marriage, and divorce other than as included in annual or monthly reports—special analyses by demographic variables, also geographic and time series analyses, studies of fertility.
- Series 22. Data from the National Natality and Mortality Surveys.*—Statistics on characteristics of births and deaths not available from the vital records, based on sample surveys stemming from these records, including such topics as mortality by socioeconomic class, medical experience in the last year of life, characteristics of pregnancy, etc.

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National Center for Health Statistics
U.S. Public Health Service
Washington, D.C. 20201

PUBLIC HEALTH SERVICE PUBLICATION NO. 1000 - SERIES 22 - NO. 10

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